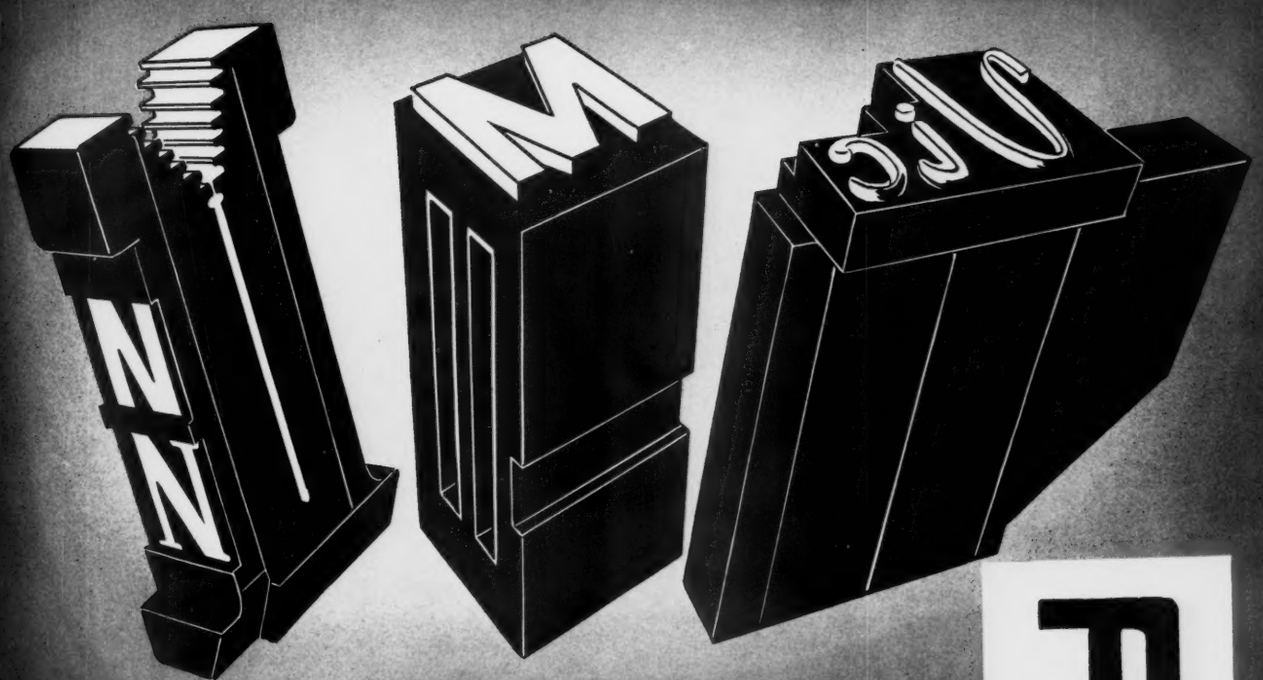
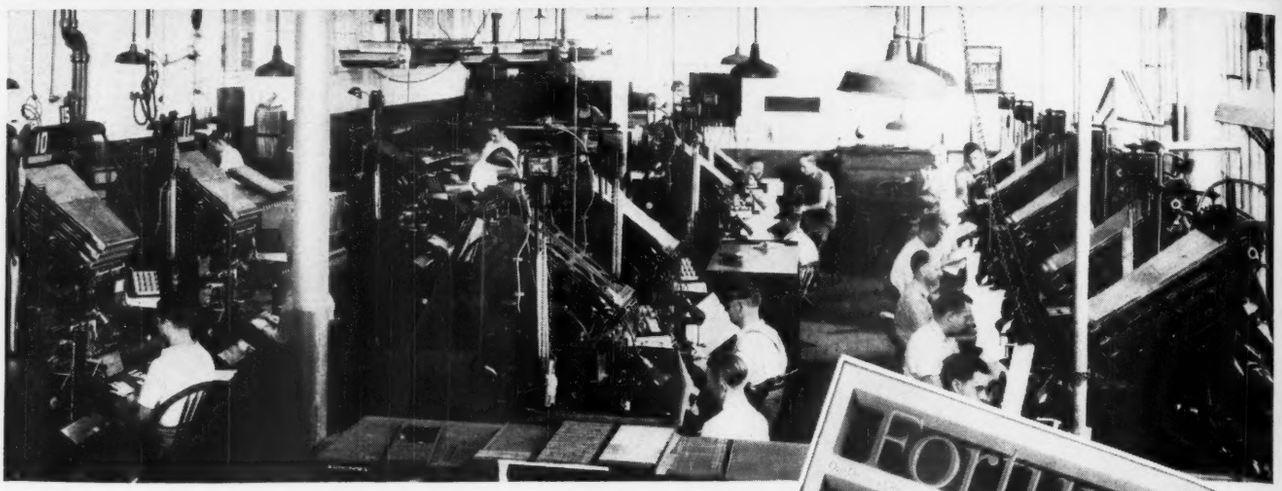
PRINTING EQUIPMENT ENGINEER



OCTOBER 1938

A TECHNICAL PUBLICATION FOR PRODUCTION AND MECHANICAL EXECUTIVES IN THE GRAPHIC ARTS INDUSTRY

Linotypes Make a Fortune



"What do you consider the world's most exacting publication job?" Ask any printer this question and 10-to-1 he'll reply, "Fortune Magazine."

And at The Jersey City Printing Company where Fortune is set and printed, you'll find a battery of 22 Linotypes, 13 of which are new Blue Streak models. Part of these machines are usually working on Fortune which is Linotype-set in Linotype Baskerville. The slugs which they turn out must be *right*, for some go into letter-press work which is subjected to the most rigid inspection. Others make reproduction proofs for offset printing . . . and nothing short of perfection is permitted to go before the camera's relentless eye. It's just the kind of job where Linotype shines . . . high-speed production of finer printing.

The Jersey City Printing Company holds another important first. It does the greatest volume of telephone directory printing in the world. Here Linotypes set names, addresses and numbers of 3,000,000 telephone subscribers in New York, Philadelphia, Washington and in dozens of other eastern cities. Every night they print revises so that at 9 o'clock next morning information girls will have listings which include all changes made the day before.

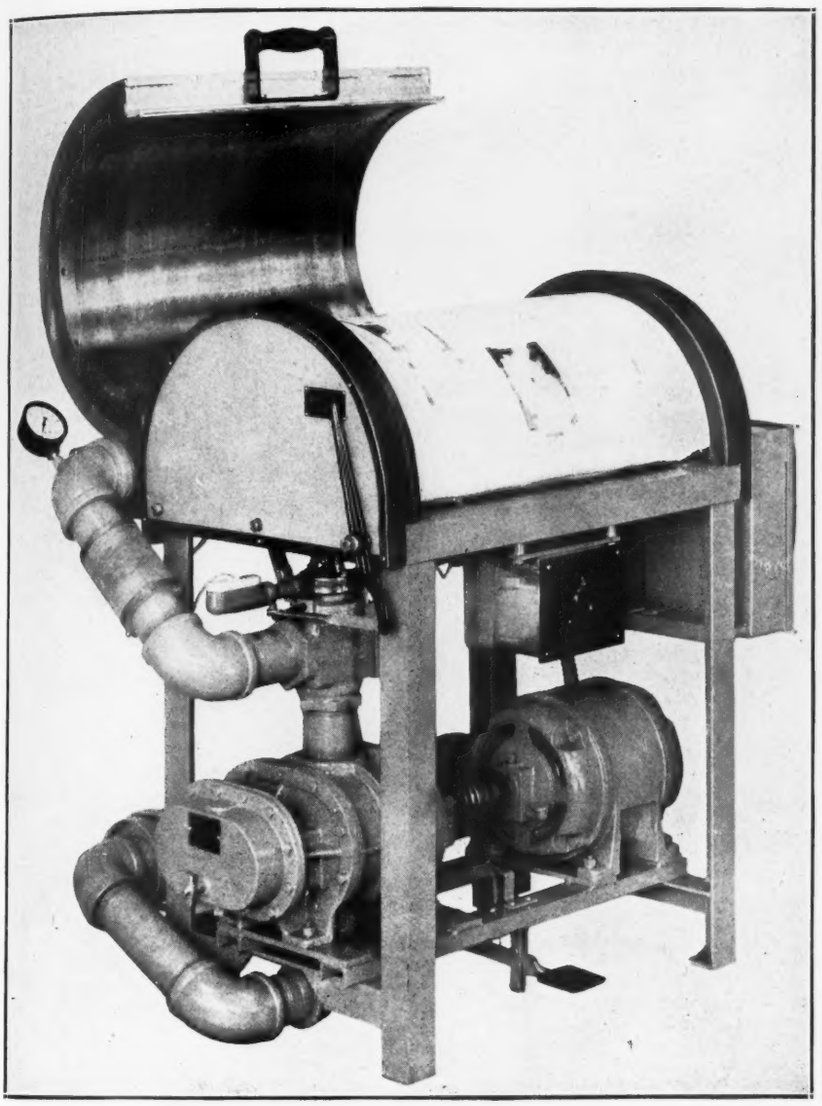
Such rigorous production schedules demand absolute dependability in composing equipment. Of course, The Jersey City Printing Company relies on Linotype. Says C. J. Smith, Composing-room Superintendent: "We have a twofold problem: fine printing for Fortune and speed for directories. Mergenthaler Linotypes always come through with both. We are especially pleased with the three new Master Models which have just been installed."

TRADE LINOTYPE MARK

MERGENTHALER LINOTYPE COMPANY

Linotype Baskerville and Memphis Family

"Has added greatly to the general appearance of our paper."



. . . Why your dry mats need Junior Former

•

WARNING: Right after the starter goes to the pressroom and the pressman calls for several new plates—usually because of ***white holes in black solids,*** it's the danger sign of ***Irregular Casting Levels*** in dry mats.

•

EXPENSIVE production costs are caused all along the line, because of ***Irregular Casting Levels*** in dry-mats. Excessive make-overs in mats and plates, too early ***break-down of press blankets,*** more power required in press because of ***heavy impression necessary,*** delays in getting editions under way.

•

THE REMEDY: The Stahi Junior Former, ***Preventive*** of ***Irregular Casting Levels,*** speeding up production operations and ***Improving Printing***—that's why ***118*** of these ***efficiency plus*** machines are in daily operation.

In **MAXIMUM SHRINKAGE** the Junior Former will always effect Uniform Casting and Printing Levels

STA-HI CORPORATION

700 EIGHTH AVENUE
NEW YORK, N. Y.

1020 CROCKER STREET
LOS ANGELES, CALIF.

417 OREGONIAN BLDG.
PORTLAND, OREGON

Providing the proper background for newspaper illustration

Photos, art work and engraving courtesy of *Journal-Herald*, Dayton.

II.

THE function of the art department as applied to illustration is generally misunderstood. This is due to the fact that artists are supposed to create an image on blank paper. This is true in one sense but does not apply to the handling of copy for reproduction, consequently artists who retouch photographs should not be expected to create an illustration, but merely to correct tone values so that inherent defects of newspaper printing will be minimized and in extreme cases deficiencies will be turned to good account.

Our staff writer visited the Dayton (O.) *Journal* and *Herald* plant a short time ago. He found the Publisher and Business Manager to be mechanically minded. The general appearance of the newspaper bears out the contention expressed that cooperation of the business office with the mechanical departments is required to produce a reasonably uniform sheet.

We found Tom Gougarty in the engraving room discussing copy with George Wiley, the engraving foreman. The engraving heading this article is a result of the conversation on the subject of uniform backgrounds.

An average portrait copy was selected and four uniform prints were made from the original negative. Four different backgrounds were painted on the copies, ranging from pure white to a near black. Each copy was photographed in the engraving room separately so as to obtain the best out of each copy. The four negatives were stripped together and etched as one plate with the regular run of the day's work.

An examination of the accompanying engraving shows that reading from left to right, the first engraving is not suitable due to the background blending with the subject, the second and third are good, while the fourth shows the effect of a white background against a dark face. This very simple example, demonstrating the impossibility of setting a definite rule for photographic backgrounds was completed in about an hour and a half and provided an object lesson to all departments and eliminated the possibility of future argument on this type of illustration.

"Just a routine example of the methods we use in making a decision in any of our mechanical departments and the main reason why we have no inter-departmental friction," said Tom Gougarty, in answer to our unspoken question.

(To Be Continued)

5,000 Year Time "Capsule"

Manufacturers and printers connected with printing industry play prominent part in preparation of contents

BECAUSE of participation, not only by manufacturers, but by prominent printers, the making of a "capsule" and filling it with present-day data, is of great interest. Ink and paper to last 5000 years were used in the production of a special "time resistant" Book of Record prepared for the edification of whoever inhabits the earth in the year 6939.

This book contains information and directions pertaining to the Time Capsule which was buried at the New York World's Fair grounds on September 23, 50 ft. underneath the Westinghouse building with the expectation that scientists 5000 years hence may recover it.

Inside the Capsule have been deposited all sorts of data describing life in 1939. Most of this was reproduced in microfilm showing how we live, what we wear, where we work, what we know of religion, history, geography, and science.

The Capsule itself was fabricated by craftsmen at the East Pittsburgh works of the Westinghouse Electric & Manufacturing Co. out of a new exceptionally durable metal—cupaloy—a copper alloy. It measures 7½ ft. in length and about 8 in. diam. The inner glass crypt is made of Pyrex glass and was closed by Glassworker Anthony Koenig at the Westinghouse Lamp Div., Bloomfield, N.J.

A vital part of this whole project is the "time resistant" Book of Record. Even assuming that archeologists in 6939 will have become exceedingly wise, they can hardly be expected to unearth the Time Capsule without some instructions. So the ultimate discovery of the Capsule depends on the permanence of this book.

The book tells the history of the Capsule and describes in detail where the Capsule is located. Maps and geodetic surveys have been included in the book which are so accurate that future scientists should be able to fix the exact spot of burial within one inch.

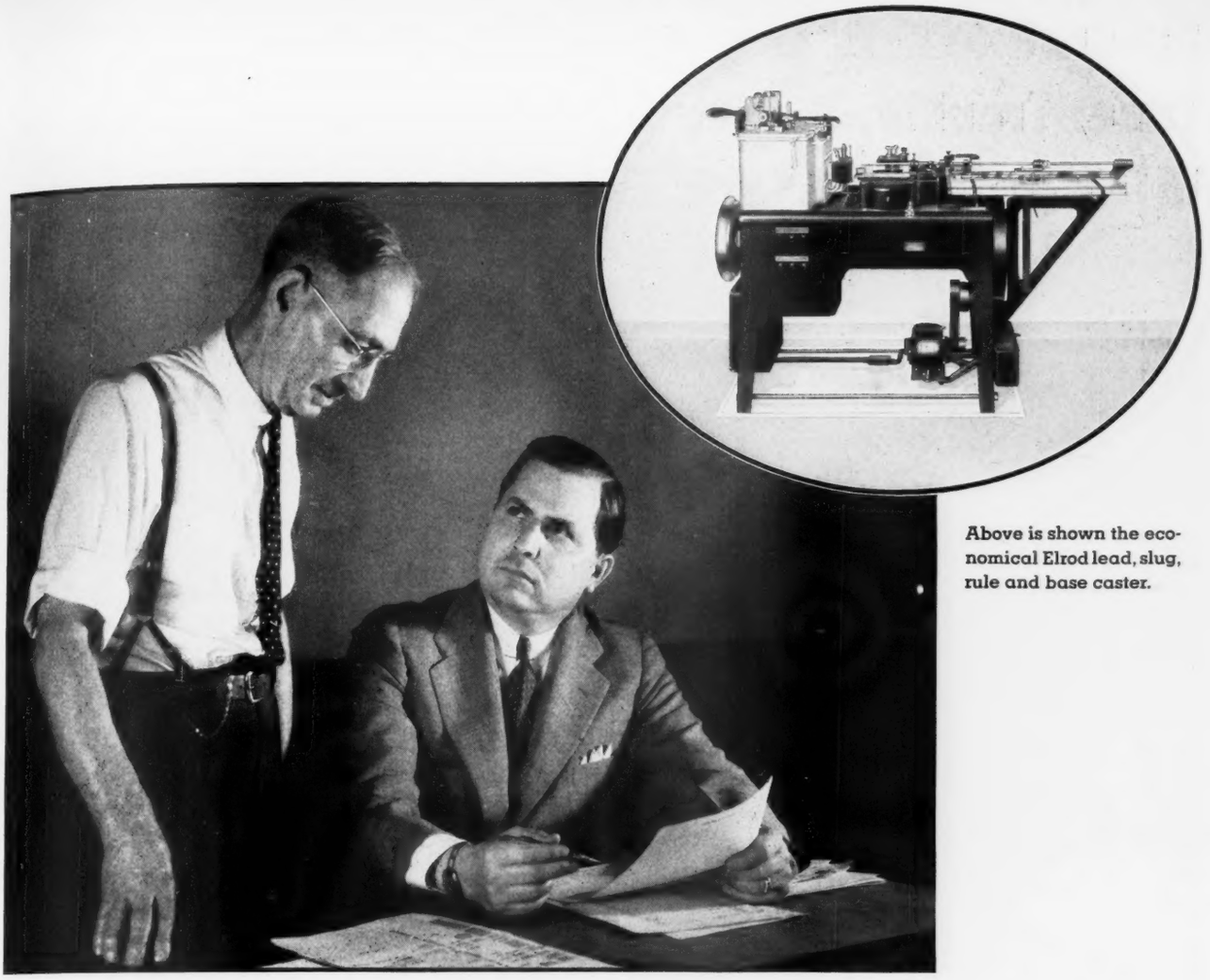
By distributing copies of the "time book" to every important library and museum in the world, it is hoped that some of these volumes will survive the centuries and guide men of 6939 to the Capsule record. The books are being produced with two thoughts in mind. First, they must resist the ravages of time. Secondly, they must exemplify the finest printing possible in 1939.

To produce the book, the United States Bureau of Standards was consulted as to paper, ink and other matters. The book, designed and set by Frederic W. Goudy at the Village Press, Marlboro, N. Y., was produced by G. Leonard Gold of the Prestige Book Company, New York City. The printing was done in Utica, N. Y., by Howard Coggeshall; the frontispiece was produced by Charles Furth at the Photogravure and Color Company of New York, and the binding was planned and produced by Randall W. Bergmann of the Russell-Rutter Company, New York. The paper for the book was made by the Hurlbut Paper Company of South Lee, Mass., and the ink, black and red, by the International Printing Ink Corporation.

A Linotype slug was enclosed in the cylinder. The slug was cast by Operator Joe Mallen in the plant of the Tuckahoe (N. Y.) *Record*. Publisher Frank Mallen says a second slug was cast and will be placed on view at the New York World's Fair.

Special formulations for super-permanent red and black ink were prepared by the Research Laboratories of the International Printing Ink Corporation. In case you're interested in inks to last 5000 years, here are the formulas: (It takes nearly 5000 years to say them.) Red-diazotised 5-chloro-ortho-toludine with beta hydroxynaphthoic-5-chloro-ortho-toluidide. Black—carbon black with Syan Blue B (copper phthalocyanine) as a toner.

Just in case the English language is no longer familiar to the world of 6939, a phonetic "key" to English worked out by the Smithsonian Institute was included in the book. Thus those who discover it will be able to decipher the language symbols so common to us today. A "mouth map" which shows how we make the sounds of various letters will clarify further "English as she is spoke."



Above is shown the economical Elrod lead, slug, rule and base caster.

"Can't We Cut Our Strip Material Expense?"

"Yes, Sir, we can really save money with an ELROD! And have a plentiful supply of strip material always!"

Simple in operation, low in first cost and maintenance, the Elrod strip caster produces a wide range of strip material with a minimum of operator attention.

Elrod product is a one piece, continuous strip of solid metal—free of brittle joints and air pockets. Elrod base and rules withstand the most severe pressure of dry mat rolling.

One machine does the whole job. You can produce the entire range of strip material from 1 to 36 point with the Elrod. Mold changes are quickly and easily made. There is no complicated mechanism to get out of order.

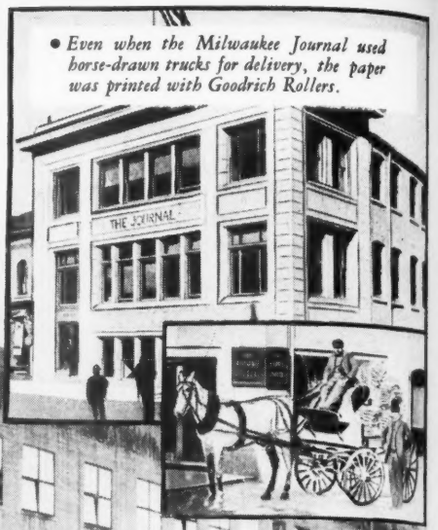
End your strip material problems once and for all. Write us today for full information regarding the Elrod.

LUDLOW TYPOGRAPH COMPANY

Set in Mandate and members of the Karnak family

2032 Clybourn Avenue + + Chicago, Illinois

Goodrich Rollers Save Pressroom Time, Trouble, Money from the Minute They Start Turning



• *Even when the Milwaukee Journal used horse-drawn trucks for delivery, the paper was printed with Goodrich Rollers.*

• *Modern building of Milwaukee Journal—the pressroom 100% equipped with Goodrich Printers' Rollers*

YOU who take pride in the efficiency of your pressroom value these results of Goodrich Printers' Rollers—

1—Cleaner printing. Goodrich Rollers, made of an exclusive compound developed by Goodrich engineers, maintain their mirror-smooth surface regardless of temperature changes. They assure cleaner printing, clearer appearance of cuts throughout the entire run.

2—End shut-downs. Goodrich Rollers will not pick up paper dust nor grit. They eliminate the costly delays of shut-downs for wash-up and resetting.

3—Save money. Goodrich Rollers last for years, with little care or attention on your part. When wear does appear, they can be reground as good as new, and go on serving you long after ordinary rollers would be worn out.

Goodrich Rollers Render Two Decades' Service at Milwaukee Journal

In 1918 the Milwaukee Journal equipped two units with Goodrich Rollers. In 1920, they equipped an octuple press as the result of proven service. In 1924, the Milwaukee Journal equipped all their presses with Goodrich Rollers. In the 20 years since, these rollers have saved so much money and time for the Journal, and have done so much to maintain the Journal's high standard of appearance, that Goodrich Rollers were automatically specified 100% for the Journal's new 12-unit Hoe Arch Type Super Production Press.

Goodrich Rollers are serving today in hundreds of pressrooms. Write for names of papers near you, where you can see them in operation. Specify *Goodrich* and you assure a better-looking paper, on the streets quicker, at lower cost.

NILES & NELSON, INC., EXCLUSIVE DISTRIBUTORS
75 West Street, New York · 400 West Madison Street, Chicago, Ill.

Goodrich *Printers'* Rollers

The Modern Press

All present day Scott Presses are equipped with solid steel printing cylinders running in large size roller bearings of proven durability and freedom from streaking.

Their Ink Motions have large ink carrying capacity and wide vibration on all inking rollers. The transfer rollers have 3½ inches vibration effect and all distributors and all form rollers 1¾ inches.

The Ink Drums are equipped with outer bearings, also with oil and air shock absorbers to relieve the vibration thrusts. The gear drive of the Scott Ink Distribution is as powerful as that of our printing cylinders.

Scott Presses get the best results obtainable from poor plates and excellent results from good plates, with no appreciable variation of inking at any speed.

These qualities, combined with Plate Locks that allow the use of the narrowest web widths at speed, give Publishers the greatest economy of operation obtainable.

●

WALTER SCOTT & Co.

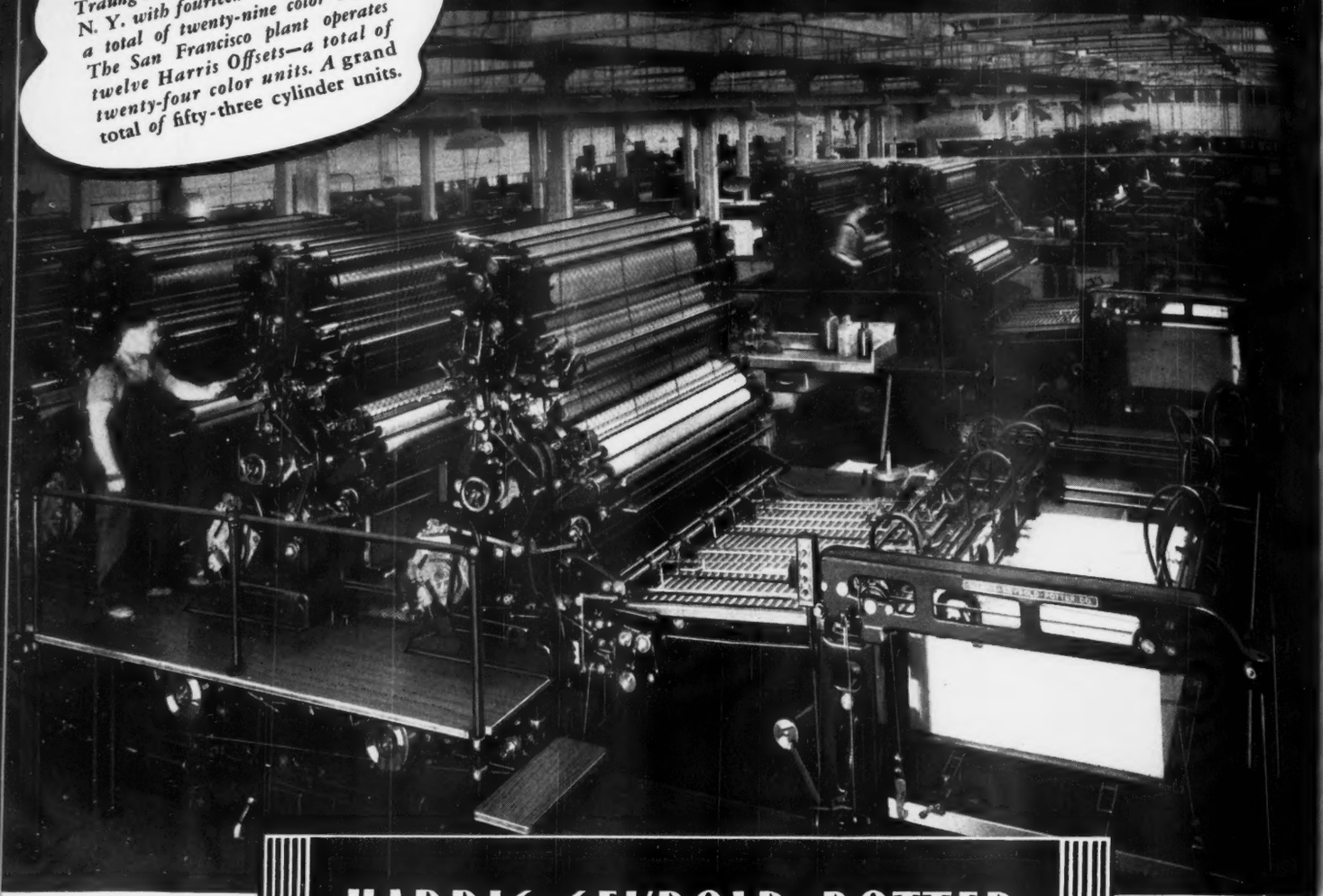
New York
230 West 41st Street

Plainfield, New Jersey, U. S. A.

Chicago
1330 Monadnock Bldg.

Choice of the Leaders

Harris Offset Installations in Stecher-Traung Lithograph Corp., Rochester, N. Y. with fourteen Harris Offsets—a total of twenty-nine color units. The San Francisco plant operates twelve Harris Offsets—a total of twenty-four color units. A grand total of fifty-three cylinder units.



HARRIS • SEYBOLD • POTTER
PIONEER BUILDERS OF *Successful* OFFSET PRESSES

HARRIS OFFSET PRESSES

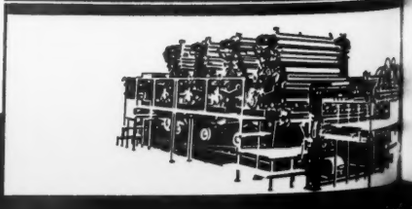
Commercial Group:

17"x 22", 21"x 28", 22"x 34" in single color.

Color Group:

26"x40", 35"x45" in single color; 41"x54", 42"x58", 46½"x68½" in one, two, three and four colors.

● Leaders throughout the Graphic Arts recognize the value of press building experience. Their choice of pressroom equipment is guided by the continued reputation of Harris presses for business profits. They know that Harris supports the skill of the pressman with precision performance and dependable service. Gauge plant possibilities by measuring equipment with the new line of Harris Offset presses.



HARRIS *Offset* PRESSES

HARRIS • SEYBOLD • POTTER COMPANY

GENERAL OFFICES, 4510 East 71st Street, Cleveland, Ohio • HARRIS SALES OFFICES

Printing Equipment Engineer

Trade-Mark Registered U. S. Pat. Office

October, 1938

Volume 57 No. 1

Contents:

	Page
Providing Proper Background for Newspaper Illustration	4
Newspaper Presses — *Curtis S. Crafts*	13
Editorial	14
Standard Thickness of Molded Rubber Plates for All-Metal Mounting — *Lee Augustine*	15
S.N.P.A. Mechanical Conference	16
Illinois Mechanical Conference — *Earl Anderson*	24
Equipment and Supplies	32
Employment and Service	42
Equipment Sales	42
Reaches Crest of Modernization Program	44
Patents	46
Technical Literature	53
Advertisers' Index	58

A Monthly Publication

ESTABLISHED 1910

Member of Controlled Circulation Audit

CCA

Published Monthly

AT 1276 W. THIRD ST., CLEVELAND, O.

Eastern Manager:

RUSS BIRCHFIELD, 509 FIFTH AVE., NEW YORK, N. Y. VANDERBILT 3-5191

Western Manager:

E. P. BLOOMSTER, 232 E. ERIE STREET, CHICAGO. PHONE SUPERIOR 2444.

Copyright 1938 by Willsea Publishing Co.; single copy, $.25; subscription price, $2.00 per year, in advance. Subscription rates for Canada and Foreign Countries on application. *Printing* Equipment *Engineer* is fully protected by copyright and nothing that appears in it may be reproduced either wholly or in part without permission.

A Technical Publication for the Mechanical Executive Responsible for Printing Production, Equipment and Supplies in the Commercial, Magazine, Private Plant and Daily Newspaper Field.

Published by Don Will • Edited by Mac Sinclair

Associate Editor: Adam Henri Reiser

Repeat Orders

for Wood Vacuum Casting Equipment

The New York Times.

The Courier-Journal
(LOUISVILLE, KENTUCKY)

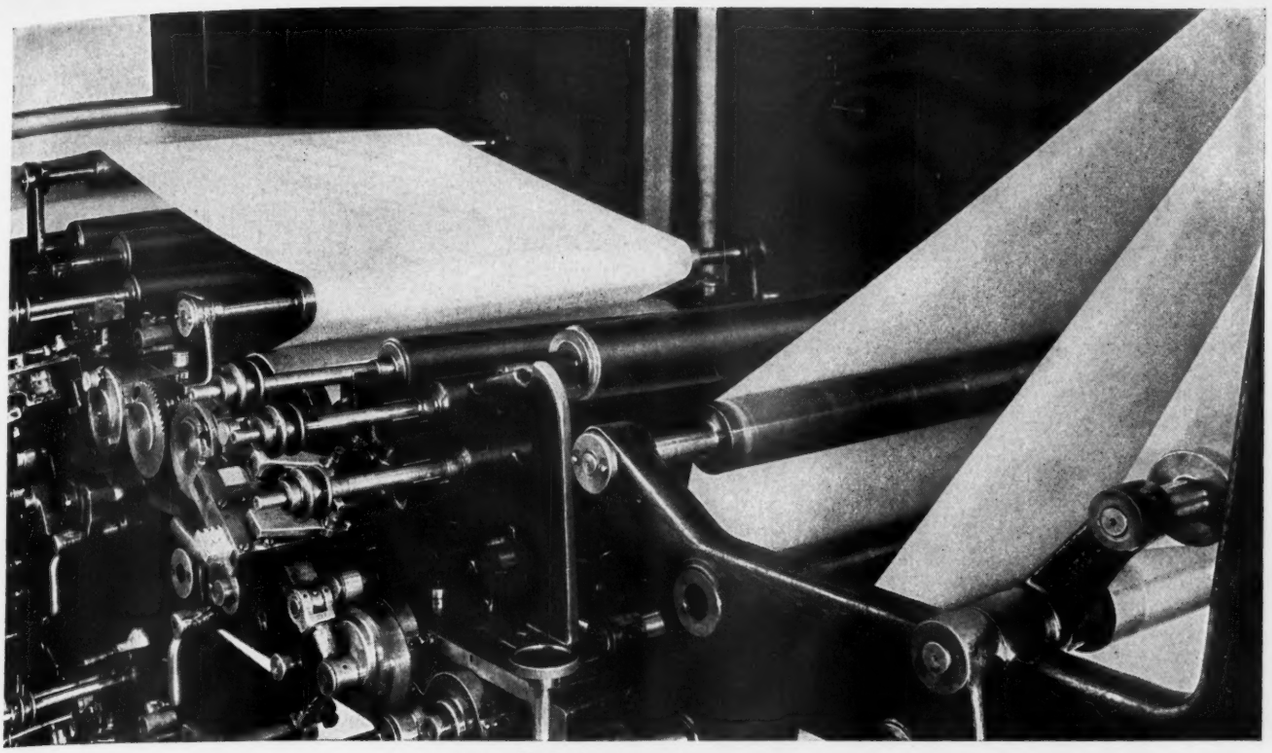
TORONTO DAILY STAR

ONE OF THESE NEWSPAPERS cited the following reasons for its repeat order for Wood Vacuum Casting Equipment: "It has considerably improved the printing of solids, halftones, and the paper generally. It also eliminates creeping of the mat, enabling us to saw close to the type, without the necessity of opening the box and pushing the mat down into place."

A LARGE NUMBER of newspapers are installing Wood Vacuum Equipment on all types of Autoplate machines—Pony, Junior and Automatic. Have YOU investigated this development?

WOOD NEWSPAPER MACHINERY CORPORATION

PLAINFIELD, NEW JERSEY • **NEW YORK OFFICE: 501 FIFTH AVENUE**



UP GOES ROLLER MILEAGE — DOWN COMES MAINTENANCE COSTS

with DAYCO "STAYPUT" NEWSPAPER ROLLERS

In large and small newspaper plants Dayco "Stayput" Rollers have not cost one penny for maintenance while other well-known rollers, *during the same period,* have needed expensive reconditioning.

So it's easy to see why Dayco's cost-free and trouble-free *plus* mileage enables them to pay for themselves out of savings —and still show a handsome profit when rebuilding is necessary.

The *entirely different* construction of Dayco "Stayput" Rollers gives them superior inking characteristics in materials of extraordinary durability. They have the right consistency and affinity for properly distributing and depositing ink. With Daycos, presses can run at top speeds under any climatic conditions. They are ink and wash-resisting. There is no ink penetration. No soft spots. No blisters. And they can be stored indefinitely without deteriorating.

Why not get actual figures and case histories of Dayco Rollers savings of time, money, and trouble for large and small newspapers? Just write for the data on longer life, faster work, and better printing with

DAYCO "STAYPUT" ROLLERS
Made Especially for Newspapers
Distributed by
GEO. H. MORRILL COMPANY
Division General Printing Ink Corporation

★ ★ ★

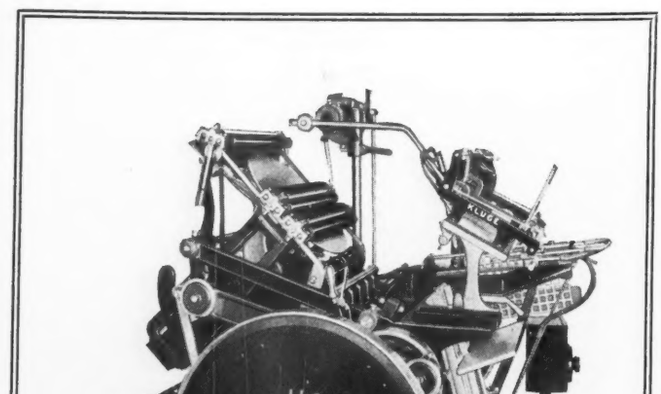
THE DAYTON RUBBER MFG. CO.
DAYTON, OHIO

Dayco Rollers

The Original Synthetic Rubber (D) Printing and Lithograph Rollers

THE ALL-PURPOSE ROLLER FOR FORM, DISTRIBUTOR, DUCTOR, ETC.

TODAY'S STANDARDS *demand* TODAY'S EQUIPMENT



In other words, the printer who is seeking profits from today's business must use up-to-the-minute equipment. He cannot keep pace with the modern demand for speed and quality with machinery of the horse-and-buggy period.

"But," says he, "it costs money to modernize a printshop." Granted. A realization of this potent fact is the reason why the KLUGE AUTOMATIC PRESS was placed upon the market on terms that would enable it to pay for itself under normal conditions, besides leaving a margin for the printer.

Another fact worth noting is that when you've installed a Kluge, you don't need another press for die-cutting and embossing, nor yet another for halftones and finer work. The KLUGE will take care of the run of the hook on everything from tissue to heavy board. Its only limitation is size and, at that, it will take an oversize sheet when necessary. Contact our nearest branch office and let our representative give you a demonstration. Make him prove our claims for the most versatile, efficient and profitable press yet built.

Talk to the Printer who operates one.

BRANDTJEN & KLUGE, INC., Manufacturers

ST. PAUL • • MINNESOTA

Branches with Operating Exhibits:

NEW YORK.....77 White Street	DETROIT.....1051 First Street	ATLANTA.....150 Forsyth Street, S. W.
PHILADELPHIA.....253 N. 12th Street	CHICAGO.....522 South Clark Street	SAN FRANCISCO....451 Sansome Street
BOSTON.....27 Doane Street	ST. LOUIS.....2226 Olive Street	LOS ANGELES...1232 S. Maple Avenue
	DALLAS.....217 Browder Street	

CANADA: SEARS LTD., Toronto, Montreal, Winnipeg, Vancouver

Newspaper Presses

And auxiliary equipment have undergone greater advance in design in last ten years than in any other decade

By CURTIS S. CRAFTS* *(Picture below)*

THE past ten years has probably seen a greater advance in the design and construction of printing machinery than any other decade. Within the past five years the speed of rotogravure printing has been stepped up from a web speed of approximately 360 ft. per min. to an average of 900 and in some instances as high as 1200 ft. per min. A like increase has been obtained in the magazine field.

In the newspaper field still further advances have been made. Whereas, ten years ago, most newspaper presses were built and sold to operate at a maximum of 36,000 newspapers per hour, and were usually actually run at a speed in the neighborhood of 27,000 per hour, practically all presses are now constructed to deliver 60,000 papers per hour and are usually run at about 45,000, and in some instances at speeds as high as 54,000 papers per hour, with a net hourly production of papers actually put into the mail room running from 36,000 to as high as 48,000 papers.

These results have been obtained with no sacrifice in the quality of the printed product. The results are due not only to improvements in the printing equipment itself but also to improvements in paper, ink, etc.

The attainment of this result has necessitated, on the part of the press manufacturer, not only a radical departure in the design of his equipment; but also an increased use of better materials, and a vast improvement in his manufacturing methods.

Dynamically Balanced Rotating Parts

The rotating parts of high-speed presses are now dynamically balanced, at the same or a higher speed than that at which they will run, to a very small fraction of an ounce. While the web of paper has a remarkable tensile strength when its thickness is considered, it must be treated rather gently during its passage through the press at speeds up to 1700 ft. per min., and any whipping of the guide rollers, etc., due to an out-of-balance condition will result in an endless number of paper breaks.

Streaking or Friaring

Streaking or friaring in the printing was long one of the bugaboos of the pressroom. This was caused primarily by two things—spring in the printing cylinders themselves, or in the form rollers, and play in the cylinder bearings. The solid steel cylinder was the answer to the first, but play in the bearings was another matter. To take all of the clearance out of a plain journal or the existing types of straight roller bearings would only result in more headaches for the pressmen, since hot or frozen bearings would be the result. This problem has been met by borrowing from the machine tool industry the preloaded roller bearing which has been used

successfully for a number of years on precision spindles of one sort or another. There are several types of bearings of this nature on the market but they are all based on the principle that all play between the rollers and the races is removed in the factory assembly and they are then further adjusted so that the compression between the parts is greater than any load which they will be called upon to carry in actual service. In this way there can be no play at this point and the streaking is eliminated.

Form and Inking Rollers

Form and inking rollers likewise have been treated. They have been stiffened up and are now mounted in anti-friction bearings having a minimum amount of play, this latter construction having been adopted not only to eliminate play in the bearings but also to reduce the possibility of spoiling the covering on the stock, since the old-style journals would heat up under high-speed operation.

Anti-friction bearings are used on practically all rotating parts in order to reduce bearing failure to a minimum and to obtain the extreme smoothness necessary at high speed.

Accurate Gearing

Spiral bevel and helical gears are now used on practically all modern high speed equipment. Great improvements have been made not only in the methods of manufacturing them but also in the materials used. The manufacturers of gear cutting equipment have also had time to study the various problems involved, with the result that gearing is now manufactured in the regular production line of an accuracy that only a few years ago could only be obtained in the laboratory. Gears up to three feet in diameter having a total runout of less than 0.001 in. and an accuracy of tooth spacing and contour measured in tenths of a thousandth of an inch are not uncommon. High grade steels, alloy bronzes, and hardened gears are used extensively.

Lubrication

The old-style press with its open type guards, and its drip oil cups and grease cups projecting from all parts, was surely an eyesore. The operators assigned to oiling the various parts were continuously on the alert to keep the equipment in operation and equipment was very often shut down due to frozen bearings. The extensive use of anti-friction bearings in some equipment reduced the danger of frozen bearings somewhat, but the oilers on this more advanced type of machine, remembering the troubles they had on the old, had a great tendency to put too much lubricant in these anti-friction bearings, and since these latter can be destroyed just as readily by too much grease as too little, bearing failure remained a not uncommon occurrence.

The modern press, therefore, has all possible moving parts such as gearing, vibrator mechanism on the ink motion . . . fully enclosed in guards. These parts operate either in a bath of oil or are lubricated by force feed through a circulating oil system from a central portion of the press units or folders. This type of construction results in not only a safer piece of equipment to operate but it reduces the human element with respect to the lubrication of the equipment to a minimum, with the result that shutdowns due to bearing failure and the like are now almost unheard of.

Ink Misting

Unit type presses have always been equipped with screen guards to protect the printing cylinders and ink motion. Solid type guards are now in common use and some installations are now in operation where this type of guard has been made to closely conform to the press framing itself, making the entire unit completely tight, to prevent the ink mist getting out into the pressroom.

Vibration Isolation

The installation of high-speed equipment on the upper floors of structural steel buildings and the incorporation of radio stations into newspaper plants has necessitated the isolation of the press itself from the building proper. Vibrations of a relatively high frequency, due inherently to the present method of printing a newspaper, are set up in the press and these cannot be eliminated. They must, however, be prevented from getting into the building, since they are not only annoying to the occupants but in the case of the radio station are liable to get into the microphones and seriously interfere with the broadcast.

Several methods have been adopted to overcome this, among them being the mounting of the entire press on either cork or rubber pads. Probably the most successful installations where this has been done, however, are

(Continued on Page 54)

**Chief Engineer, Goss Printing Press Co., Chicago. Abstract of address delivered before the Illinois Newspaper Mechanical Conference, Chicago, September, 1938.*

Editorial

Production Tolerances

THE average newspaper mechanical executive delights in accomplishing difficult production in an emergency for the good of the newspaper. Occasionally, his ingenuity is strained in order to accommodate the editorial or advertising departments upon special occasions. At these times, he does not wish to be cited for value to the firm by his publisher—his reward is in knowing he has done something special and is glad to feel that he was able to meet the emergency. However, when the "emergencies" become a regular diet to such an extent that it interferes with orderly production schedules and because he is helpless to arrange in advance for these unanticipated demands, then it becomes a matter of coordination upon the part of management. All too often management does not lend a responsive ear. The principal reason in many cases is that the production executive can't get relief because he is not as adept at salesmanship as he is in production matters. This seems like a simple statement, but it is true, nevertheless.

The photo-engraver upon demand doesn't mind exercising his ingenuity in turning out a rush cut in seventeen minutes; the composing room foreman likewise takes pride in an emergency such as occurs upon receipt of a late advertisement or the break of a big news story, or when the paper is "jumped" from one edition to another; when the stereotype superintendent occasionally is called upon to streamline bunched pages into the pressroom and the pressroom superintendent in turn must put on the pressure to make trains because of the foregoing production abnormalities, no complaint is entered, because newspaper departmental executives like to meet emergencies which are caused by conditions over which no one in the entire publishing and production organization has any control.

The newspaper executive is entitled to tolerance in the management of his production capacity. If an automobile is rated at 80 m.p.h., it is wise for more than one reason to drive it at an average speed of 50 miles per hour where conditions permit, keeping the extra in reserve for emergency cases. The wise newspaper mechanical executive attempts to operate upon this principle.

All too often, if the discussion at the various newspaper mechanical conferences is any indication, there is prime need for the introduction of some kind of co-ordinating element or authority in many newspaper plants. It's the co-ordinator's business to adjust the flow of all copy from the business, editorial and advertising departments, according to the capacities of the mechanical departments. On the other hand, the mechanical departments may need co-ordinating, too Co-ordination between all departments rests with management. Be it said, however, that management itself needs co-ordinating in some instances. This is evident from the reaction at the mechanical conferences. It is evident that management for some reason is not in the habit of listening to complaints from the heads of the mechanical departments.

Constant straining of production routine which injected itself into the discussion at the Atlanta Mechanical Conference has reared its ugly head at A.N.P.A. and other newspaper mechanical conferences too. Paraphrasing the words of an executive at the Atlanta S.N.P.A. Conference, "When copy is marked 'first edition must' and then is not used, the executive's morale is destroyed." The newspaper executive is entitled to a certain tolerance or elasticity in his production schedule and we hope he finds ways and means to convince management he is entitled to it. Since management has seen fit to create these mechanical conferences, mechanical executives have every reason to believe that attention will be paid increasingly to inter-departmental co-ordination throughout the entire organization.

Craftmen's Research Bureau

IT IS reported that the Research Bureau of The International Association of Printing House Craftsmen is now organized and ready to serve individual as well as the collective membership in numerous research activities. The Bureau was officially established on October 3. Hon. A. E. Giegengack, Public Printer of the United States, is chairman of the Craftsmen's Research Commission which established the Bureau.

Having ready access to the sources of information and experience of the Government Printing Office, the United States Patent Office, the Bureau of Standards, the Library of Congress, and other numerous cooperating Government agencies, this new Bureau is prepared to reply to individual inquiries relating to published information concerning developments in the Graphic Arts Industries regarding materials, equipment, processes, and technique.

The Craftsmen's Research Bureau is also equipped to prepare memoranda surveying the entire literature of selected subjects of wide interest to the Graphic Arts Industry.

In order to more promptly supply information to individual members, the Bureau has begun the compilation of a classified card bibliography of the current literature covering subjects of primary interest to craftsmen, such as: Printing and photographic reproduction processes, papers, inks and pigments, bookbinding methods and materials, and many related subjects.

As a supplement to *Share Your Knowledge Review* (Craftsmen's official publication) there will be published by the Bureau a concise monthly Bulletin restricted to technical developments of especial importance to the Graphic Arts.

Information can be supplied promptly concerning articles published in current issues of foreign or domestic periodicals since these will be scanned regularly by the Bureau as issued, and recorded in the card bibliography. Those of vital importance will be abstracted in the Monthly Bulletin.

The membership can also secure through the Bureau accurate information concerning current patents relating to the Graphic Arts and issued by the United States, Great Britain, France, and Germany, as these will be scanned regularly and systematically by the Bureau and recorded in the card bibliography, the most important being cited in the Monthly Bulletin.

The preparation of translations from French, German, and other languages of both articles and patents will be undertaken by the Bureau, and abstracts will be incorporated in the Monthly Bulletin to be issued.

To accomplish this work, a Research Associate and Secretary have been employed who are dedicating their entire time to the organization and development of the Craftsmen's Research Bureau and with enthusiastic and experienced determination propose to serve the membership. As Research Associate there has been appointed for the first year, Adolph Law Voge, M.E., Cornell graduate and student of chemistry at Dresden, Leipsic, and Zurich Universities, experienced bibliographer and linguist with a background of fifteen years devoted to the preparation of chemical and metallurgical reports relating chiefly to the literature and patents, and including an association of several years with a prominent laboratory of the Printing Ink Industry. As Secretary to the Research Associate, Miss Janet Pearlstein has been appointed. Miss Pearlstein holds a B.A. degree from the Department of Chemistry of the University of Wisconsin.

It is to be understood that the Craftsmen's Research Bureau plans to avoid duplication of effort so far as practicable and to cooperate gladly and generously with other research institutions.

The Craftsmen's Research Bureau is located in the Government Printing Office at Washington, D. C., advantage being taken of the Research Associate plan, as applied to Government laboratories and other institutions by Act of Congress.

The operation of the Bureau will be under the general direction of the Public Printer, A. E. Giegengack, Chairman of the Research Commission of The International Association of Printing House Craftsmen, and under the detailed supervision of M. S. Kantrowitz, Technical Director, Division of Tests and Technical Control, Government Printing Office, Washington, D. C.

Thickness

Of molded rubber plates should be standardized to correspond to standard electro thickness for all-metal base mounting.

By LEE AUGUSTINE*

BECAUSE molded rubber printing plates are being used to an increasing extent, both on rotary presses and on flat-bed cylinder presses, it is quite important to have these plates made to an acceptable standard height, and to have the plates properly mounted for the best results in printing. At the present time, with a few exceptions, molded rubber plates are being made to a number of different heights. This is causing considerable confusion among users.

When molded rubber printing plates are made to a standard thickness or height, and when they are accurately mounted on a patented all-metal base, makeready work on the press is reduced to a minimum and the printing can be produced under the correct mechanical conditions. There is less wear on the surface of the plates, the inking can be done to great advantage, and close register of the printing is assured.

Mr. Augustine discusses advantages of having molded rubber plates of standard thickness from production standpoint.

These facts apply not only to single-color rubber plates, but also to the newer makes of precision molded rubber plates which are now being produced for multi-color printing in from two to eight colors. On this point, it is interesting to note that both the new types of pigmented aniline ink and the new makes of quick-drying oil-base ink are now being used for multi-color printing from molded rubber plates, on a wide variety of paper, paper-board and other stocks. Printing from the same kind of plates is also being done in gold, aluminum and other metallic ink colors.

Finished to Electro Thickness for Patent Base

For use on any make, size or style of a flat-bed cylinder press, and where a patent all-metal plate mounting base is to be utilized, it is practicable for a manufacturer of molded rubber printing plates to make and finish the plates to the same standard height as that of unmounted electrotypes, i. e., 0.152 in. With the use of sheets of the newer makes of adhesive fabrics which are coated on both sides with a strong, tacky rubber compound, the rubber plates can be attached to a patent all-metal plate-mounting base in the desired positions. All the sectional blocks of one system are 12-point lined in both directions, to facilitate accurate makeup, and the slight indentions of the 12-point lines help in anchoring the adhesive part of the plates more firmly than on an ordinary flat base.

*Advertising Manager, Printing Machinery Company, Cincinnati, O.

Standard Height Plates Now Available

As a matter of fact, several well-known electrotype companies are now making to order standard height molded rubber printing plates, ready for regular attachment to patent all-metal plate-mounting base. These plates include duplicates of 100-line screen halftones, all kinds of line engravings and zinc etchings, forms of type matter, type-and-rule forms, photo-engravings of the multi-color class, and "combination" forms of type composition and line engravings. Each of these electrotypers have a special department with complete equipment for the making of vulcanized rubber printing plates. The molded rubber plates are also made for use on the plate cylinders of single-color and multi-color rotary presses.

One highly successful make of the molded rubber printing plates, for use in connection with a patent all-metal plate-mounting system, placed on a flat-bed cylinder press, is described briefly as follows:

Zinc Backing for Mounting on Patent Base

Both the mold from the original form and the molded plate are made on a double heated platen type of machine known as a hydraulic vulcanizing press. Unvulcanized sheet rubber, about 0.090 in. thick, is used in making the molded plate, and the sheet of rubber is vulcanized while on the mold, for about 12 min. at a temperature of approximately 290 deg. F. By means of a special adhesive, the finished plate is firmly attached to a sheet of zinc which is about 0.062 in. thick. The completed plate is now close to 0.152 in. high, the same as the standard height of unmounted electrotypes. The edges of the zinc backing of the rubber plate are beveled to 20 deg. With the usual register hooks, the metal-backed plate can be attached to a patent plate-mounting base.

Section of Blatchford Metal Base suitable for the mounting of metal-backed molded rubber printing plates.

Curved Metal-Backed Plates for Grooved Cylinders

With the essential plate-curving machine, curved metal-backed molded rubber plates of the same style as described, can be made for attachment to grooved plate cylinders on a rotary press, of practically any make, size or kind. The new "PMC Warnock" mechanical rotary hooks can be used to hold and register sets of this style of metal-backed rubber plates on grooved plate cylinders of any rotary press. Of course, any other kind of hard metal backing may be used for molded

(*Continued on Page 50*)

S. N. P. A. Mechanical Conference

MARKED by strict informality, the second Southern Newspaper Publishers Association Mechanical Conference was called to order by Secretary-Manager Cranston Williams at Hotel Atlanta Biltmore, Atlanta, Ga., on Monday, September 19. Mr. Williams stated there would be no opening ceremonies, no welcoming address, but that since this was a mechanical conference being held for the benefit of production department executives, the meeting would get down to business immediately.

The program as prepared by the Committee on Arrangements contained no stated addresses of any kind. Everybody who spoke during the two-day meeting did so spontaneously from the floor in answer to the questions outlined in the program as indicated by the chairman. The program was divided into five sections—Composing Room, Pressroom, Photoengraving Department, Stereotype Department and Miscellaneous Subjects.

The meetings were in charge of Presiding Officer W. A. Carns, Mechanical Superintendent of the Birmingham (Ala.) *News* and *Age-Herald*. Mr. Carns announced that each session would be divided into periods. Each period to be devoted to one of the mechanical departments. Each of which would be presided over by an executive from one of the member papers who is identified with the department to which that period was being devoted.

Pressroom Section

Mr. Carns took charge of the meeting and stated Joseph J. Strickland, Nashville (Tenn.) *Banner* and *Tennessean*, would conduct the pressroom section discussion. The opening discussion centered about the question of reducing waste in the pressroom. Guy Aycock, pressroom superintendent of the Chattanooga (Tenn.) *News*, said his printed waste and folder waste were put on the scales after the run, but would like to know how others handle waste. He stated he dragged the sheet through the cylinders by hand when threading a press to save waste. Most papers not using reels come to dead stop to make roll change. As a result, nine papers are spoiled. It was stated, however, that in some pressrooms as high as 22 papers were spoiled. Chairman Strickland remarked that in his plant the waste could be held down to five papers if the flyboy used care. There is some waste due to show-through. In reducing waste, the tension man is an important factor.

Rolls Stripped At Unit

Chairman Strickland stated in his plant the rolls are brought endwise on dollies up to the unit and the rolls are stripped at the unit. Frank A. White, Pressroom Superintendent, of the Augusta *Chronicle*, arose to inquire if there is a snag in the roll, whether the waste is taken off at the unit. Chairman Strickland stated all damaged paper is taken off at the press and is charged to white waste. Mr. White observed that his pressmen used bottle openers to cut out damaged paper from the roll.

In speaking of making the change from plain to roller bearings on his units at the Atlanta *Journal*, J. L. Turner stated the roller bearings hold the impression better, there is less spring and he obtains a better printed sheet.

When setting impression, Peter G. Prassinos, Pressroom Superintendent of the New Orleans *Times-Picayune* and *States*, stated the cylinders have a tendency to open up at speed. Impression should be set with plates on the cylinder. If there is any wear in the bearings, the plates will take it up.

In answer to the question respecting 4 pt. column rules and narrower roll widths, Production Manager M. George Martin, Chairman Strickland and others explained the technique involved when changing from 6 pt. rules and wide paper. Mr. Martin stated his plant is using 4 pt. column rules and 67 in. rolls, with 7/16 in. margin. Clips are 45 deg., 3/4 in. top, 9/32 in. bottom.

It was generally agreed that the mechanical executives present should concentrate on the study of tension, spring rollers and long press leads to eliminate offset and strike-through as much as possible. Chairman Strickland and R. R. Fulton, Pressroom Superintendent of the *Times-World*, Roanoke, Va., voiced the sentiments of the executives present.

In answer to a question by Frank White who stated he had trouble with spreading of first impression halftone dots during second impression printing, Chairman Strickland ventured the opinion that the difficulty is due to offset.

J. L. Turner of the Atlanta *Journal*, says much pressroom trouble is caused by strike-through; other causes are spring rollers, loosely wound roll or light tension. The trouble becomes worse when it is due to the ink. Hard, transparent paper, however, is the cause of more pressroom trouble than any other single cause.

Roller Ghosting

Chairman Strickland brought up the problem of the ghosting of large type from roller to plate showing in a halftone. One executive stated his pressroom equipment is new, yet he is troubled with ghosting. Guy Aycock ventured the opinion that sometimes this trouble is caused by improperly set rollers. The inside form roller is set too heavy on ink

(*Continued on Page 20*)

Some of Those Attending Southern Newspaper Publishers' Mechanical Conference

1—*M. George Martin, Production Manager, Louisville* Courier-Journal *and* Times; *G. L. Thompson, Composing Room Superintendent, Memphis (Tenn.)* Press-Scimitar; *C. B. Capps, Charlotte (N. C.)* News.

2—*Fred Billker, Milwaukee Saw-Trimmer Corporation, was busy demonstrating the company's products at the Atlanta Conference.*

3—*Fred Connell, Composing Room Superintendent, Atlanta* Journal.

4—*George Myers, Atlanta Manager, Ludlow Typograph Co.*

5—*Cranston Williams, Secretary-Manager, Southern Newspaper Publishers Association and Ralph Buvinger, Wood Newspaper Machinery Corporation.*

6—*Seated, John Davis, Manager New Orleans Agency, Mergenthaler Linotype Co.; standing, T. C. McLemore, Mechanical Superintendent, Mobile (Ala.)* Press-Register; *I. J. Gardner, Production Manager, Chattanooga (Tenn.)* Times, *new Chairman of the Committee on Arrangements; W. A. Carns, Mechanical Superintendent, Birmingham* Age *and* News-Herald, *retiring Chairman of the Committee.*

7—*Front Row: R. R. Fulton, Pressroom Superintendent, Roanoke (Va.)* Times-World; *George H. Center, Herrick Ink Co.; Clarence Seaman, Vice President, Imperial Type Metal Co. Rear Row: Henry Logsdon, Stereotype Superintendent, Louisville* Courier-Journal *and* Times; *A. D. Peoples, Pressroom Superintendent, The Raleigh (N. C.)* News *and* Observer; *Guy Aycock, Pressroom Superintendent, Chattanooga (Tenn.)* News.

8—*W. F. Grenier, Sales Manager and "Scotty" Campbell, of New England Newspaper Supply with Miss New England (Miss Georgia Peach, some insisted) who distributed rosebuds at the Atlanta Conference.*

9—*G. F. Elrod, Ludlow Typograph Co.; A. T. Mann, jr., Vice President, Intertype Corporation; W. B. Sandlin, Mechanical Superintendent, Miami (Fla.)* Herald; *Clifford Alves, Composing Room Superintendent, Tampa (Fla.)* Tribune.

10—*W. B. Astor, jr., Stereotype Superintendent, Memphis (Tenn.)* Commercial-Appeal; *Harry Bray, Imperial Type Metal Co.; Floyd Elrod, Stereotype Superintendent, New Orleans* Times-Picayune *and* States; *L. E. McCracken, Stereotype Superintendent, Atlanta (Ga.)* Georgian-American. *At right (behind Mr. McCracken) G. F. Elrod, Ludlow Typograph Co. The other two gentlemen were not identified—sorry.*

11—*W. B. Streeter, Pressroom Superintendent, Augusta (Ga.)* Herald *and Frank A. White, Pressroom Superintendent, Augusta (Ga.)* Chronicle.

12—*Ed. C. Morgan, Stereotype Superintendent, Miami (Fla.)* News; *Joel Brooker, Stereotype Superintendent, Tampa (Fla.)* Times; *C. L. Ray, Mechanical Superintendent, Winston-Salem (N. C.)* Journal-Sentinel; *John P. White, Mechanical Superintendent, Charlotte (N. C.)* Observer. *Rear: Ernest D. Dodd, Composing Room Superintendent, Little Rock (Ark.)* Gazette.

13—*William Duboc, Hamilton Mfg. Company and D. T. Stephenson, Burgess Cellulose Company.*

14—*Guy F. White, Mechanical Superintendent, Gastonia (N. C.)* Daily Gazette; *Carl Denman, St. Louis Manager, J. M. Huber, Inc.*

15—*R. R. Mead and H. Allison, Mergenthaler Linotype Co. and George Stone, Composing Room Superintendent, Atlanta (Ga.)* Constitution.

16—*Clyde V. Lancaster, Composing Room Superintendent, San Antonio (Tex.)* Light, *and Frank L. Gardner, Machinist, Chattanooga (Tenn.)* Times.

17—*Sidney Henson, Pressroom Superintendent, Ft. Worth* Press *and G. A. Rosengren, Pressroom Superintendent, Memphis (Tenn.)* Press-Scimitar, *meet for the first time in 18 years at the Atlanta S.N.P.A. Conference.*

18—*C. D. Adkins and E. A. Rolls, Geo. H. Morrill Co., Philadelphia; C. S. Reilly, Goss Printing Press Co., Chicago; J. H. Strickland, Pressroom Superintendent, Nashville (Tenn.)* Banner *and* Tennessean; *J. O. Boobert, Pressroom Superintendent, Knoxville (Tenn.)* Journal.

19—*Claude Baker, Composing Room Superintendent, and George F. Downes, Chief Machinist of the New Orleans* Times-Picayune *and* States. *Center: Mac Sinclair, Editor,* Printing Equipment Engineer.

20—*William Thompson, Monomelt Company, and H. R. Capps, Chief Machinist, Jacksonville (Fla.)* Times-Union.

21—*Howard Felix, Imperial Type Metal Co., John J. Morgan, Federated Metals Div. of American Smelting and Refining Co., and C. Frank Mann, Composing Room Superintendent, Louisville* Courier-Journal *and* Times.

1
2
3
4
6
7
8
9
10
11
12
13
14
15 16
17

Padgett with *Plain Dealer*

Leon A. Link, Production Manager of the Cleveland *Plain Dealer*, announced recently that Deo Padgett, formerly composing room superintendent of the Milwaukee (Wis.) *News-Sentinel*, has been appointed composing room superintendent of the Cleveland *Plain Dealer*. Mr. Padgett assumed his new duties Monday, October 3. Mort Moeder will continue in charge of day side operations.

Horn Joins Linograph

General Manager C. E. Murray has announced that Harry L. Horn has been appointed sales manager for Linograph Corporation, Davenport, Ia. Mr. Horn assumed his

new duties September 1. He is well known throughout the middle west, having been associated with the printing equipment and supply field for some time.

Splendid Lecture Series

This season's lecture series of the Department of Publishing and Printing of the Rochester (N. Y.) Athenaeum and Mechanics Institute, will include seven experts in various branches of the graphic arts. Summerfield Eney, Champion Paper and Fibre Company, addressed a large gathering, September 20 on "Pressroom Troubles and How to Prevent Them."

Speakers for the rest of the season are as follows: October 18—Frederick G. Heitkamp, Vice President in Charge of Sales of the American Type Founders Company, "What Is the Outlook for Printing in Rochester?"

November 22—George Welp, International Printing Ink Corporation, "Color."

January 17—The Harris - Seybold - Potter Company will show its talking movie.

February 21—Lex Claybourn, Claybourn Division, C. B. Cottrell & Sons Company, "Modern Methods of Letterpress Printing, and Precision Standards."

March 23—Howard N. King, Maple Press, York, Pennsylvania, "Questions and Answers on Layout Problems."

April 18—John Collins, Chief Engineer, American Type Founders Company, "Plant Layout and Equipment for Best Printing Production."

Two new instructors were added to the teaching force this year. Frank DeWitt, formerly production manager of Otter Valley Press, Inc., Middlebury, Vt., and C. M. Cook, formerly of the Research Division, Miehle Printing Press and Mfg. Company.

A New Roller Development

Sam'l Bingham's Son Mfg. Co., Chicago, announces a new soft roller base used in its roller coating system, this base being as soft as a cast composition roller. This system consists of a durable roller base which is surfaced with renewable glue-glycerine composition. The composition coating is applied with a roller surfacing machine, developed and designed for the purpose by C. C. Bingham, president of the Company.

When the outer surface of glue-glycerine composition becomes marred or begins to show wear or loses the tackiness which is so essential to the proper distribution of ink, the whole roller can be put into a tank of hot water where the surfacing of composition is removed. The base, being of durable rubber is not affected in this operation. The stock with its base is then placed in the roller surfacing machine and a new surface applied to the base. After a short time of seasoning the new roller is ready for use.

These roller bases are made of different materials, the soft rubber base however, is said to have an ordinary period of life much in excess of four years.

One of the advantages claimed for this type of roller is its use where sectioning of the roller is desired because of split fountain work. This surface of composition can be sectioned according to the needs of the color combinations used on the job, the base itself not being cut. After the particular sectioning job has been run, the surface can be washed off and the base recovered either for ordinary work or for new sectioning, according to the new demands.

Further information regarding these new Bingham roller surface machines and the system can be obtained from any representative of the Bingham organization.

P-Double-E File No. 5NN.

Third Essay Contest

Trips to both World's Fairs, New York and San Francisco, will be offered to contestants in the Third Annual IPI Essay Contest for high school printing students, which is announced this month. IPI will sponsor this project once more in cooperation with the National Graphic Arts Education Guild.

Announcements are being sent to printing teachers in all parts of the country. All entrants must be enrolled in high school printing courses. There will be two divisions with two separate sets of prizes—one for freshmen and sophomore students, the other for juniors and seniors.

First prize in the upper division will be a $400 scholarship to the Carnegie Institute of Technology's School of Printing. A trip to the World's Fair, either in New York or San Francisco depending on the location of the prizewinner, is the second award.

Aldine Award

The Aldine Award, established in 1936 by Harry E. Gould, President of the Aldine Paper Company, and presented each year to the two juniors with highest scholastic standing in the Department of Printing, Carnegie Institute of Technology, was this year won by Ralph Ives of Topeka, Kansas and Joseph E. Barnes of Rochester, N. Y.

Formal presentation of the Award will be made this Fall, when the students return to school to complete their senior year. First prize of a cash award and a Bronze Medal will be presented to Ralph Ives and a second cash award will be given to Joseph Barnes.

GE Dividend

The board of directors of the General Electric Company recently declared a dividend of 20 cents a share for the third quarter, payable October 25 to stockholders of record on September 23.

New Burgess Ink Co., Inc.

The name of Acheson Ink Company, Inc., Buffalo, N. Y., has been changed to Burgess Ink Company, Inc. The stock interest in the company formerly held by the Acheson interests has been taken over by Ralph E. Burgess and associates.

Mr. Burgess for the past twenty years has been Vice President and General Manager of the company, and its business will continue to be conducted under his active management.

On Annual Visit

A. T. Mann, Jr., vice president in charge of sales of Intertype Corporation, is now on his annual visit with his company's branch offices and business friends throughout the country. Captain Mann expects to be away from home until about December 10.

New Eastern Sales Manager

The Christensen Machine Co., Milwaukee, Wis., has announced the appointment of Henrik ("Henry") Reimers as Eastern Sales Manager in charge of the newly opened New York Office at 50 Church St.

Mr. Reimers has long been associated with the industry. He was with the Dexter Folder Co., for many years, as engineer and salesman. He then joined the Walter Scott Co., and at the time of his appointment to the Christensen Company was associated with George R. Swart Co.

New Company Formed

Crocker, Burbank & Co. Assen., Louis Dejonge Co. and Clarke and Co., announce the formation of Crocker, Burbank Papers, Inc. Headquarters of the new company will be in Fitchburg, Mass. Ralph M. Beckwith is president and treasurer, Norman Harrower is vice president and assistant treasurer, and H. T. Eaton and Arthur L. Bull are vice presidents. In the company's announcements it is stated that except for additions there will be no changes in personnel. The Company produces uncoated and coated book papers as well as paper to meet special requirements.

Recent Linotype Installations

Linotypes recently have been installed by the Centralia (Wash.) *Daily Chronicle;* Davenport (Iowa) *Democrat; Scott Country Journal,* Scottsburg, Ind.; *Dispatch-Journal,* Dallas, Texas; *Rockbridge County News,* Lexington, Va., Universal Linotyping Company, Inc., New York; Eudora (Ark.) *Enterprise;* Tupelo (Miss.) *Daily Journal;* Hall Printing Company, Harlingen, Texas; Quinton (Okla.) *Times;* Durango (Colo.) *News;* Montgomery (Pa.) *Mirror;* Richard W. Hanwell, Inc., East Orange, N. J.; *Catholic Register,* Denver, Colo.; Cannon Press, Inc., Chicago; Central High School, Muskogee, Okla.; Acme Press, Lexington, Ky.; Long Beach (Calif.) *Record;* Santa Cruz (Calif.) *Morning Sentinel;* Strehl, Olivier & Landers, San Francisco, Calif.; Davenport (Iowa) *Times;* Integral Art Publishers, Berwyn, Ill.; New York School for the Deaf, White Plains, N. Y.; *Itasca Iron News,* Coleraine, Minn.; Board of Education of the City of Chicago.

Two Colors at High Speed

AND COTTRELL QUALITY

MADE IN TWO SIZES

	MAXIMUM SHEET	MINIMUM SHEET
Small Press . .	27x28	11x17
Large Press . .	28x42	19x26

This press will open up a new source of profit for many printers.

It is a press for runs of moderate length as well as long runs. With the perfected curved plates which are now easily obtainable, make-ready on this unit is practically eliminated: and first-grade process work can be run at the rate of 5000 two-color sheets per hour.

Thus the average commercial printer can now obtain, on jobs of ordinary size, the great economies which are enjoyed by large edition printers.

Mechanical features include: Automatic stream feeder. Automatic plate cylinder trip.

Claybourn spirally grooved cylinders. Claybourn rapid register-hook system.

Convenient ink roll-back. Quick fountain adjustments. All adjustments accessible from floor. All rollers interchangeable.

Remarkable ink distribution and simplicity of operation.

BUILT BY

CLAYBOURN DIVISION

C. B. Cottrell & Sons Co.

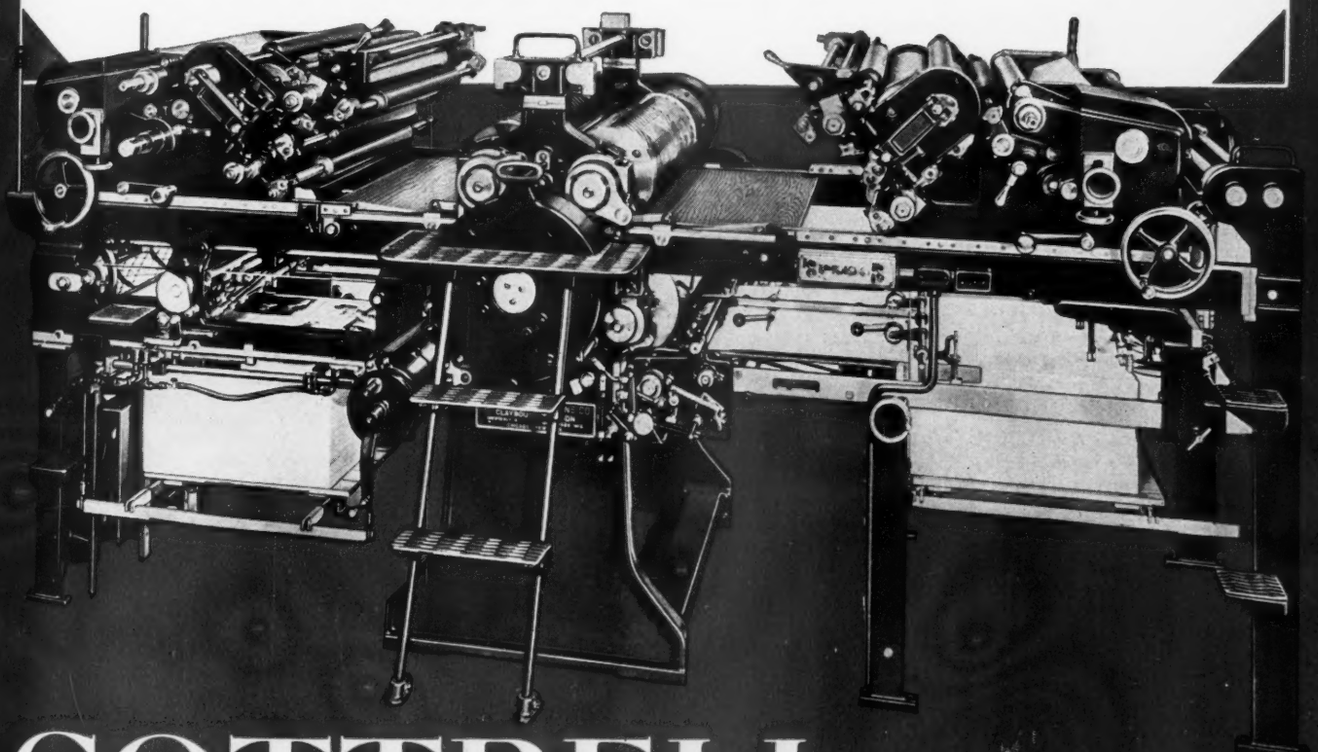
Milwaukee, Wisconsin

C. B. Cottrell & Sons Co., Westerly, R. I.

NEW YORK: 25 EAST 26TH STREET

CHICAGO: 332 SOUTH MICHIGAN AVENUE

SMYTH-HORNE, Ltd., 1-3, Baldwins Place, Gray's Inn Road, LONDON, E.C.1



COTTRELL

two-color rotary press

S.N.P.A. Mechanical Conference Committee On Arrangements

Shortly before adjournment of the Atlanta S.N.P.A. Mechanical Conference, Cranston Williams, S.N.P.A. Secretary-Manager, announced that the personnel of the Committee on Arrangements had been expanded from six to nine mechanical executive members, to secure as wide a departmental representation on the committee as possible. Amplifying the plan of rotating the committee personnel to prevent "freezing," it was announced that three of the members will have finished their membership on the committee each year and three new members will be selected to replace the offgoing members. I. J. Gardner, Production Manager of the Chattanooga *Times*, was selected chairman for 1939.

The committee members and duration of their membership are as follows:

1939—W. A. Carns, Birmingham (Ala.) *News* and *Age-Herald;* W. B. Sandlin, Miami (Fla.) *Herald;* John P. White, Charlotte (N. C.) *Observer*.

1940—I. J. Gardner, Chattanooga (Tenn.) *Times;* T. C. McLemore, Mobile (Ala.) *Press-Register;* Henry M. Duke, Charleston (S. C.) *News* and *Courier & Post*.

1941—Fred Connell, Atlanta (Ga.) *Journal;* R. R. Fulton, Roanoke (Va.) *Times* and *World-News;* H. E. Logsdon, Louisville (Ky.) *Courier-Journal* and *Times*.

S. N. P. A. Conference

(*Continued from Page 16*)

and plate. Another executive suggested that ghosting may be caused by rubber rollers, the surface of which is too hard and as a remedy the rollers should be reground. There seems to be a difference of opinion about the degree of hardness or softness of rubber rollers because some of the executives stated their presses were fitted with new rollers. In the opinion of several executives, rubber rollers have a softer surface after grinding. In the opinion of J. L. Turner, roller-bearing roller sockets provide a more free action with less friction than plain bearing rollers. The rollers should be set a little heavier to the ink than to the plate.

Stereotype Section

Presiding Officer Carns called upon Stereotype Superintendent L. E. McCracken of the Atlanta (Ga.) *Georgian-American* to conduct the stereotyping section of the program.

Five-Eighth Inch Maximum Shrinkage

Mr. McCracken took up the first question on the stated program which referred to the proper amount of mat shrinkage for good results. Most of the discussion of the executives under this question seemed to center on the maximum amount of shrinkage which it is practicable to obtain and yet secure good plates. W. B. Astor, jr., Stereotype Superintendent, Memphis (Tenn.) *Commercial-Appeal*, stated 5/8 in. shrinkage can be obtained just as easily as 1/2 in. shrinkage with good results. Mr. Astor, in reply to a question from Clyde V. Lancaster of the San Antonio (Tex.) *Light*, stated he secures 5/8 in. shrinkage but doesn't specify to the mat manufacturer any particulars respecting the making of the mat. It is his advice that the mechanical executive merely tell the mat manufacturer what he wants in the way of mat shrinkage. The *Commercial-Appeal* is printed from 66 1/2 in. roll, 6 pt. column rules, 3/8 in. margin, Plates have 45 deg. bevel. Mr. Astor stated in the case of the Junior Autoplate, a little more margin would be needed. In reply to a question respecting the length of pages in relation to shrinkage in width, Mr. Astor said the length is obtained by adding equivalent lines per page according to crosswise shrinkages. If you shrink five lines, just add five lines in length.

W. I. Calloway, Stereotype Superintendent, Atlanta *Journal*, said 5/8 in. shrinkage is about all a stereotyper can expect to get without distortion. The mat manufacturer will supply you the shrinkage you may require. In manipulating technique with increased shrinkage, forms should be clean when received from the composing room, because inky type faces are objectionable inasmuch as it doesn't take much pull to tear a mat. He uses a hard cork and a good molding board without creeper. The roller must be watched to eliminate stretch in the mat. The roaster should be warmed and then set. Preheat slowly to shrink the mat. He carries 2 in. of vacuum on the Stahi to dry the mat. It takes no longer to dry the mat this way than in the case of the ordinary mat; in other words, it's a per-heating proposition. Further suggestions made by Mr. Calloway were that the line-casting machinist should watch his slugs for columnwise measurement so as to keep the forms down to size.

Vacuum Casting Boxes

There was plenty of testimony favorable to vacuum casting equipment in newspaper stereotype departments and the resultant better printing qualities of the plates cast in vacuum boxes. Henry Logsdon, Stereotype Superintendent of the Louisville *Courier-Journal* and *Times*, stated that while he notices a small amount of creep but which he is eliminating from one of his boxes, there is less error in plate curvature. He secures a more perfect printing surface with not to exceed 0.0015 to 0.002 in. variation.

Harry Wilson, Stereotype Superintendent of the Birmingham *News* and *Age-Herald*, stated vacuum boxes have just been installed in his plant. Experience so far is that type lines print better, the hair lines in type are more nearly perfect and the plates come more nearly close to prefection. Joseph J. Strickland stated makeovers (due to sinks, etc.) had been reduced from 20% to 25% since installation of the vacuum equipment. Clarence Seaman, Imperial Type Metal Co., reported that executives in plants in which vacuum casting boxes had been installed are unanimous in their opinion that more accurate plates are produced and that a number of annoying defects common to stereotype plates have been eliminated. Development of the vacuum casting box is indeed an improvement which represents progress.

Fred Connell, Atlanta *Journal*, asked Chairman McCracken if he doesn't aim to have all type matter in the form 0.918 in. McCracken replied in the affiirmative. The purpose of raising cuts by some executives is to obtain more squeeze and greater depth in molding. The cuts will be slightly higher as a result.

Monday Afternoon

Photo-Engraving Section

Presiding Officer Carns requested Louis Hess, Photo-engraving Superintendent of the Memphis (Tenn.) *Commercial-Appeal*, to take the chair and conduct the photo-engraving section of the program.

E. O. Aslinger, Photo-engraving Foreman of the Atlanta *Georgian*, discussed the question, "Should the photo-engraver accept responsibility for the reproduction of all art?" In his opinion, the photo-engraver should accept that responsibility.

Fred Connell rose to remark that the Atlanta *Georgian* never could print good pictures until authority had been turned over to the photo-engraving superintendent.

Photo-Engraver, If Qualified, As A Judge of Copy

Chairman Hess observed that the photo-engraving superintendent should have the final word except where spot news photo copy must be used, in which case responsibility for the results passes to the editor. In some cases, the engraver is expected to be a magician with poor copy. The biggest trouble with good photo-engraving on newspapers is the time element. Very often, the photo-engraver is too timid in asserting when copy is poor before the cut is made. However, under certain conditions, and lacking other arrangements, the responsibility for results should be placed in the managing editor. In making his observation about the photo-engraving superintendent accepting responsibility, he qualified the observation by stating that the head of the photo-engraving department should be intelligent and competent to judge picture copy.

In the general discussion about newspaper halftone printing, it was remarked that the bumping-up of cuts is worth while if the time element permits. With respect to the molding of halftones which have been underlaid there is a tendency for the dots to flatten out. The photo-engraver can regulate this somewhat by making smaller highlight dots.

Lloyd Bellamy, Journal Engraving Co., Atlanta, in discussing "What abuses if elimi-

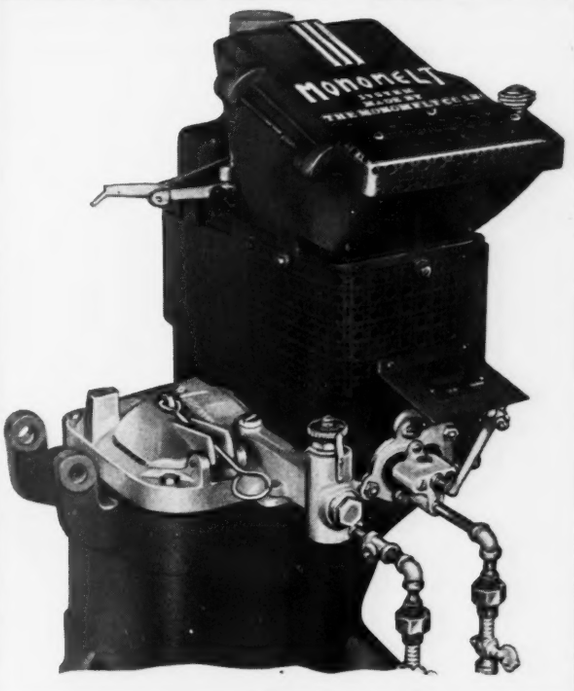
The printing of a newspaper is a manufacturing operation. If the production or mechanical executive really needs repair parts to keep his equipment in first-class productive condition, he should have them. In the long run, management pays, either for repairs or a new machine.

Said Ralph Buvinger, Wood Newspaper Machinery Corporation Representative, at Atlanta S.N.P.A. Mechanical Conference.

INCREASE PRODUCTION CUT COMPOSING COSTS REDUCE DOWN TIME

with MONOMELT

Here is a modern system of direct melting and feeding that provides automatic control of temperature and automatic control of metal flow and level under any type-casting capacity. With Monomelt there is a constant supply of molten metal ready to be fed into the machine pot as rapidly as metal is withdrawn for casting. There is no feeding of cold metal. Because the metal is pre-melted and fed in the molten state the temperatures in the machine pot can be maintained at from 40° to 50° lower than with cold pig feeding. This means from 40° to 50° lower temperatures in the molds and prevents heat from building up. The closer to the point of solidification temperatures can be kept the more slugs can be cast and the fewer the down time hours for hot metal squirts. Monomelt regulates your metal system and helps your machines deliver more slugs that are cleaner, sharper and more uniformly solid. Install Monomelt to increase production, to reduce overhead, to step up quality. Monomelt will save and make you money!



NEW FEATURES ON NEW *Streamlined* UNITS!

NOW THE MONOMELT SYSTEM OFFERS GREATER ADVANTAGES THAN EVER BEFORE!

New reinforcement in crucible tube! New non-oxidizing, non-corroding materials in pot and lower pot thermostats, in feed valve and valve seat! New method of opening hopper which makes for easier drossing, easier dumping of slugs! New protective covering to protect operator from heat radiation and burns! New style of lower pot burner! These are some of the many recent improvements that make Monomelt a greater value for your money than ever before! Find out why hundreds of plants are switching to Monomelt. Write for details. Why melt metal twice when you can put yourself money ahead melting only once!

MONOMELT CO.

1611 Polk Street N. E. Minneapolis, Minnesota

HERE'S A STURDY PRECISION SHAVER FOR ALL FLAT WORK!

Have you been looking for a sturdy, compact shaver, economical to buy and easy to operate? Plane - O - Plate meets your requirements! Built for high-speed, heavy-duty work, Plane - O - Plate will shave down electros, stereos, flat casts of all kinds to exact type-high thickness for printing. It will save money, improve quality in your stereotyping department. Investigate Plane-O-Plate!

WRITE FOR PRICES AND CATALOG FOLDERS NOW!

nated would improve the quality of art and facilitate production?" said one of the serious abuses in the daily newspaper plant is the lack of time to produce a good cut, perhaps in many instances in 20 or 30 minutes. When the photo-engraver is given an order to produce a cut in 30 minutes or less, it is practical insurance against getting that cut into the paper.

Charles J. Conrad, Photo-Engraving Superintendent of the New Orleans *Times-Picayune* and *States*, related that in an emergency his engravers make a negative without joining the dots, place celluloid against the negative and etch in one bite to produce a cut in 17 min.

Photo-Engraving Abuses

Mr. Hess's idea of abuses interfering with photo-engraving production consists principally of the holding up of photo-engraving copy when it might just as well have been sent in as soon as ready, possibly three or four hours earlier. In some plants, time copy is treated as spot copy. He believes that the flow of copy should be confined to as few persons in the editorial departments as possible. In some papers, hardly a week passes but what 500 to 1000 inches of finished cuts have been made which never get into the paper.

Mr. Hess told of receiving, in one particular instance, a photo marked "First Edition Must." The picture was not printed in any edition on that day. In checking up with the editorial employe who sent it to the engraving department he asked why the picture wasn't used. He was told: "Well, I thought it might get in." He finished off his remarks by asserting that when copy is marked "First Edition Must," and then is not used, the photo-engraving superintendent's morale is destroyed.

Composing Room Section

C. B. Capps, Composing Room Superintendent of the Charlotte (N. C.) *News*, conducted the composing room section of the program which was taken up immediately following cessation of the photo-engraving section.

Causes for Sunken Slugs

H. R. Capps, Chief Machinist of the Florida *Times-Union*, explained in thorough manner the causes and remedies for sunken line-casting machine slugs when forms are molded. He said there are four fundamental causes: (1) Unbalanced metal, (2) Imperfect pump action, (3) Metal temperature, and (4) Mouthpiece ventage. He described the care of metal as a big factor in the production of solid slugs. To secure perfect pump action, the pot pump plunger and crucible well must not permit metal to escape from between the parts, and thus decrease pump pressure during the downstroke of the plunger. When the machine is standing at normal position, the bottom of the plunger should rest just above the crucible well intake holes. This condition should be checked occasionally, as well as to see that the pot well feed holes have not become clogged with dross to prevent replenishment of the metal under the plunger. Occasionally, the pot pump plunger spring will become "set" through crystallization and should be removed. The crucible throat should be cleaned out when there is any evidence that it has become clogged which would interefere with the flow of metal in volume through the mouthpiece into the mold. With careful attention to the points enumerated above there will be no cause to worry about the production of solid slugs with clear type face characters.

Metal and Human Nature

George Myers, Atlanta Manager for Ludlow Typograph Co., also spoke on the subject of porous slugs. In relation to the production of type matter, five factors are involved: Machines, metal, combustion, nature and man. Iron and steel don't mean anything so far as newspaper production is concerned until touched by the hand of man; the same is true of printing metals. Of great importance, particularly, is the care which should be given composing machine metal. Metal manufacturers provide a fine product and it should be kept in its original condition by intelligent care. The mistake made by many executives is to hire a roustabout to care for this metal without giving him proper instruction and to see that all employees treat metal as it should be treated to maintain its correct condition. Mr. Myers' discussion was finished when he stated that the most important factor involved is Human Nature and that unless the human factor dominated production nothing could be done to remedy poor type matter. After all, the stereotyper can reproduce only what is in the form which is sent to him from the composing room and if there are bubbles under the type faces and other defects in the form elements all the ingenuity exercised by Nature, the machine and metal manufacturer is nullified.

Matrix Letter Alignment

H. R. Capps, in reply to the question: "Prevention of bad letter alignment on type slugs," discussed the factors regulating and controlling alignment in line-composing machines. Misalignment is caused by (1) Wear in the matrix itself, (2) Wear in first elevator adjusting bar, (3) Parallel alignment of first elevator in relation to the mold aligning grooves, (4) Duplex rail for auxiliary matrix alignment, (5) Vertical lockup of the matrix line under tension (auxiliary position) just before the cast. Mr. Capps stated wear on matrix lugs in the amount of 0.010 in. is very noticable in newspaper composition. He exhibited a gauge which he made for the purpose of checking the condition of matrices to determine when the aligning points had become worn sufficiently so that the matrices should be discarded.

Teletypesetter Data

The Teletypesetter came in for some discussion. Paul Porter of the Dothan (Ala.) *Eagle*, reported operation of two Teletypesetter equipped machines, one of which is operated at 7½ lines per minute and the other at 8 lines. He states two operators punch 3000 lines in tape form in 8 hours. The printers, however, work six hours and forty minutes per day. The tape punchers keep the two keyboard-operated machines busy for the six-hour and forty-minute day and in addition have time enough left to punch a serial story tape (35 columns) which has not yet been used.

Mr. Williams reported there are now 25 Teletypsetter installations, 19 of which are in the United States, 1 in Hawaii and the balance in England.

George Myers reported that on the Vicksburg (Miss.) *Post*, day and night operation due to morning and evening papers, three Teletypesetter machines are producing 3200 lines each in 8 hours. The machines are operated at a little better than 8 lines per minute. Production continues during lunch periods. Market composition is handled as readily as straight-matter. He stated each of the machines was fitted with a slug-receiving galley approximately twice as long as the regular galley, or about 36 in. in length.

(Continued on Page 55)

Exhibitors

Representatives from the following firms set up equipment and displays in the booths provided for that purpose at the Southern Newspaper Mechanical Conference held at Hotel Atlanta-Biltmore, Atlanta, Ga., on September 19 and 20:

American Typefounders
Bayliss Machine & Welding Co.
Federated Metals Division, American Smelting & Refining Company
Milwaukee Saw Trimmer Corp.
Monomelt Company
National Printing Appliance Co.
New England Newspaper Supply Company
Rapid Electrotype Company
Rapid Roller Company
United American Metals Corp.

What Executive Should Know

By EDWIN H. STUART

FROM the production angle, every superintendent should know that it is a pleasure to work when you have all materials at hand—but this is not the most important thing. A craftsman can work at half-speed or two-thirds speed and still produce more if he has all the material he needs at hand than if he has to hunt material frequently.

Years ago, when I worked as a journeyman in the composing room, I bought my own lead and slug cutter. I mounted it on the window sill near the cabinet where I worked. Did I do this because I loved the boss? Not on your tin-type. The boss was an insolent red-headed s. of a b. who inherited the business from his father. He treated the men like cattle. Also, I had a complete set of sticks and three compact lead cases which contained spacing material.

Now, why did I buy my own labor-saving devices? Because I could produce fifty per cent more work with half the effort, and drift along easy through the day, spend 30 minutes reading the sport page in the toilet room, or go visiting in another department and still, at the end of the day I would have produced more than the average compositor. The foreman hated me, but would he fire a good producer? No, he would not!

NEW TOOLS *in* PENNSYLVANIA

In the stereo department they spell *modernize* K-E-M-P . . . especially down Pennsylvania way. In the new plant of the Pittsburgh Post-Gazette (center) there's a new Kemp 10 ton immersion melting pot doing its stuff. At the Sharon Herald (right) a Kemp 5 ton unit speeds up casting, and at the Allentown Call-Chronicle-News (left) another 5 ton Kemp installation sets a fast pace for the stereotypers. And in every case Kemp equipment pays its way in lower fuel bills, irrespective of faster melting, closer temperature control, or dross reduction.

One reason for the mounting enthusiasm of publishers in Pennsylvania (also 47 other states and various foreign nations) is the brass-bound, copper rivetted, hand-tooled guarantee under which Kemp Immersion Melting is sold . . . our unconditional promise to save you 40 per cent (or more) in fuel. We put in the equipment. You use it, decide for yourself whether it's as good as we say. If you don't like it, out it comes. If you do like it, you buy it. And if you want a broader guarantee, *just write it!* In any case write **The C. M. Kemp Manufacturing Company, 405 E. Oliver Street, Baltimore, Maryland.**

KEMP of BALTIMORE

Most of these men are executives in mechanical departments of the Chicago Daily News *and were in attendance at the Chicago meeting of the Illinois Newspaper Mechanical Conference. Left to right they are as follows: Clyde Kennard, Leonard Wakefield, Pete Orlebecke, Otto Kaspar, Harry Pottle, Ben Rauscher, Carl Wenzel, Harold Faltz, Barney Harvie and Fred A. White. Harry Pottle is associated with Western Newspaper Union, while Fred White is Chicago Branch Manager for Mergenthaler Linotype Company.*

ILLINOIS MECHANICAL CONFERENCE

By EARL ANDERSON*

AT the annual meeting of the Illinois Daily Newspaper Composing Room Executives association a committee was appointed to revise the by-laws of association so that executives from all newspaper mechanical departments would be included at its future meetings. The committee appointed included: Harry Scott, Decatur Newspapers; Russell Miller, Bloomington *Pantagraph;* George Bolton, Joliet *Herald-News;* Harry Pottle, Western Newspaper Union, Chicago; Fred Wing, Peoria *Journal-Transcript.* The name of the association hereafter will be the Illinois Newspaper Mechanical Conference.

The new officers of the Association elected at the Chicago meeting follow: President, Lee Moore of the *News-Gazette,* Champaign; Vice President, Dave Wood, Kankakee; Secretary-Treasurer, Earl E. Anderson, Rockford Consolidated Newspapers; Director, Harry Scott, Decatur; Russell Miller, Bloomington; George Bolton, Joliet; Harry Pottle, Chicago; Fred Wing, Peoria. The next conference city is Champaign, Ill.

One hundred and forty-one delegates registered at this convention which was the largest ever recorded in the history of the association.

At the annual banquet Sunday noon, 136 delegates and wives were in attendance. The association was fortunate in having Hon. Augustus E. Geigengack, U. S. Public Printer, as the main speaker. His talk about the government printing office was most interesting. Frank Bauer of the *Herald-Whig,* Quincy, acted as toastmaster. Mr. Bauer did a splendid job in this capacity.

At the group meetings on Sunday afternoon numerous topics were brought forth for discussion. Much credit for the success of these meetings must be given to the chairman of each group: Leo V. Gonigam, composing room; Clark Means, stereotype and pressroom; Harry Pottle, machinists.

At the meetings on Monday very instructive messages were given by the speakers. The questions asked and the discussion which followed demonstrated the interest taken.

A highlight in the convention was the talk on composing room type metals presented by Karl Neibecker of the Imperial Type Metal company. Mr. Neibecker was occupied fully an hour after his talk answering questions and leading in discussion. Very helpful information on metal was brought out.

The other speakers on the Monday program were Jack Lyons of Mergenthaler Linotype Company who gave a talk on composing room methods. Mr. Lyons stressed the point that composing room superintendents must be on their toes to improve their product and at the same time cut costs. Because of low advertising volume and decrease in revenues this was imperative.

C. S. Crafts, presented a paper on recent developments in newspaper presses. See page 13, this issue.

Leon V. Gonigam, Ottawa (Ill.) *Republican-Times,* was chairman at the Monday meetings.

The reaction to the meeting just held in Chicago was one of fine results for those in attendance who were looking for information. More than ever it is evident from the discussion from the floor that the publisher sends his executives to these conventions for the information which can be brought back to better his organization. One can only get out of a meeting what he is willing to put into it.

At the next conference of the Illinois group it is reported the officers expect to have a roll call at meetings, a copy of which with a stenographic report of the preceedings will be sent to publishers after the meeting.

The state meeting can accomplish much because most of the newspapers are compar.

**Superintendent, Rockford (Ill.) Consolidated Newspapers.*

Left to right in attendance at the Illinois Newspaper Mechanical Conference: Carl E. Newport, Jacksonville Journal-Courier; *John S. Plummer, Chicago Branch Manager, Intertype Corporation; Hon. A. E. Giegengack, United States Public Printer; Edward G. Nagel, Champaign* News-Gazette; *Herbert Clark, Elgin* Courier-News.

Keeping in Touch

WONDERS—Seven wonders of the ancient world and a modern scientific wonder were combined recently by the Shell Oil Company of Canada in planning their current campaign. The advertising features the seven wonders of the world and it is designed in contrasting colors. To get colors of maximum contrast, Shell called on a modern wonder for help—IPI's recording spectrophotometer. This amazing instrument measures the characteristics of more than two million colors. By comparing the measurements disclosed by the "Specter," Shell was able to determine just which colors would give them the best results.

DEFINITION OF INK—What your customer thinks about last and complains about first.

UPTREND—We'd like to contribute an item to the encouraging statistics which are being quoted to show that business is on the way up again. Our chief adder-upper reports that 86 *more* magazines are being printed with Vaporin inks in 1938 than in 1937. This brings the total to over 200, and more are in the offing.

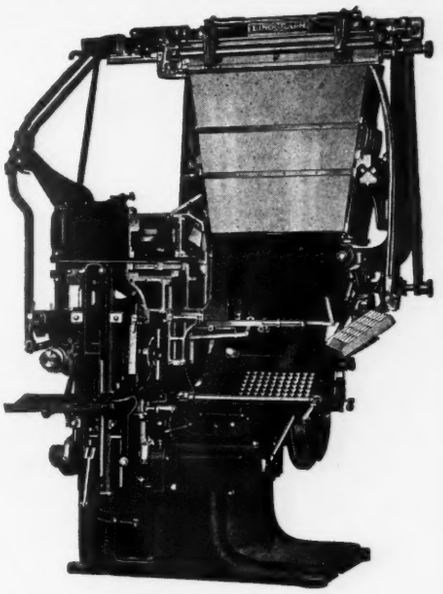
HELLO, 6939—"This is how we did things 5000 years ago." That might be the message in the Westinghouse "Time Capsule" which you have read about in the newspapers. Containing a cross section of life in the 20th century, this metal cylinder was buried last month under the New York World's Fair grounds with the expectation that scientists 5000 years hence might find out what a strange people we were. Such works as the BIBLE, the ENCYCLOPEDIA BRITANNICA, and the ATLAS were tucked away inside the Capsule for future generations to marvel at, and a set of IPI's "THREE MONOGRAPHS ON COLOR" was included, too.

But you don't have to wait 5000 years to read the Monographs. They have been called an outstanding contribution to color knowledge. Write to us, and we'll be glad to tell you how you can get a set. "Keep in touch with IPI."

THE INTERNATIONAL PRINTING INK CORP.
DEPT. P.E.O., 75 VARICK STREET • NEW YORK CITY

ipi

BRILLIANT PERFORMANCE
Plus STAYING QUALITIES
EXPLAIN THE
INCREASING
PREFERENCE
FOR THE NEW
QUALITY
LEADER
MODEL 50 LINOGRAPH



Mechanical men are amazed as they discover point after point of Linograph "50" superiority such as

Main Cams of chrome-nickel alloy;

Elevator Jaws of oil-hardened tool steel; and

Chromium Plated Distributor Bar.

These and many other long wearing specification features combine to overcome the weak points heretofore common to typesetting machines.

Get acquainted with this new stamina-built leader, Linograph "50"—fast, smooth, easy to operate—handles standard matrices in range from 5 point to 24 point full width, including many slightly condensed 36 point faces—accurate, economical and lasting. And all at a surprising price under a complete guarantee.

LINOGRAPH CORPORATION
DAVENPORT, IOWA

WRITE TODAY *for this* FREE BOOK

LINOGRAPH CORP'N
Davenport - - - - - Iowa

Gentlemen: Please send me your Linograph "50" Catalog.

Name.....

By.....

City.....State.....

These DISTINCTIVE MONOTYPE AD

Keyboard and Caster operated separately—neither being subjected to delays or distractions of the other.

Integrity of the type design is preserved in casting each letter on a separate body.

Many faces designed especially for the Monotype.

Room for 225 matrices in the matrix case (magazine).

Accents and special characters available for practically every printed language.

Up to six alphabets of three different faces can be combined in one keyboard operation.

Many thousands of signs, symbols, special characters, etc., for all classes of work.

The flexibility which goes with the use of single type.

Monotype-cast type is always new, freshly cast for use in producing good printing.

Monotype-cast type of uniform height and perfect printing surface reduces make-ready time.

Equalized letter-spacing is conveniently done.

Side-heads may be different from text-matter in point size and face, and can be set in same line.

After ke
type eit

Run-aro
the oper

The poin
cast type

Set size o

Differen
the same

Sets type

Produce
facility,

Type ma
size than

Set size
characte

Errors i
rected w

The Mon
large an

It is nearly fifteen years since I gave you our order for our Monotype Typesetting Machine. I cannot think of any equipment investment we have made that was more profitable or of greater help to us in developing our business than our Monotype.

FRENCH-BRAY PRINTING CO., BALTIMORE

Text set in Stymie Light; Display set in Monotype Onyx, Broadstroke Cursive, Stymie Medium and Stymie Bold.

TYPE ADVANTAGES *will make money for you!*

IN YOUR OWN COMPOSING ROOM

. . . If you operate a Monotype Typesetting Machine

OR

THRU A MONOTYPE-EQUIPPED COMPOSITION PLANT

. . . If you buy your machine typesetting

After keyboarding, the choice may be made to cast type either solid or leaded.

Run-arounds for cuts or initials are easily made by the operator and set with rest of copy.

The point size and width measurement of Monotype-cast type are accurate to within 2/10,000".

Set size of Monotype faces may be changed if desired.

Different point sizes can be set in the same line on the same body at the same time.

Sets type lines in measures up to 60 picas in width.

Produces all kinds of tabular matter with equal facility, including vertical and horizontal rules.

Type matter may be cast on a body of smaller point size than the face.

Set size may be reduced to increase the number of characters in lines.

Errors in single type composition are easily corrected without resetting the entire line.

The Monotype keyboard speed is the same for both large and small sizes of type.

Keyboard ribbons may be run any time anywhere.

Matrix case is easily changed in casting machine.

All classes of composition are automatically spaced, aligned and justified.

Groups of six or more characters automatically repeated at rate of 36,000 ems per hour at keyboard.

Machine composition embraces all sizes from 4 to 18 point, composed on the same keyboard.

Monotype metal is harder and makes for long press runs, and saves money in electrotyping.

Quads and spaces may be either "low" or "high" as desired to suit the work in hand.

The opportunity is afforded to decide between all machine work, all hand work, or a combination of both, in setting any given job.

"Reprints" are particularly profitable to the Monotype owner—who saves the Keyboard ribbon for a rerun.

Write for further details

Lanston Monotype Machine Company

Monotype Building, 24th and Locust Streets, Philadelphia, Pa.

Karl Nibecker, Imperial Type Metal Company, delivered an address on type metals and discussed metal problems with executives attending the Illinois Newspaper Mechanical Conference in Chicago.

RIGHT:
New Officers of the Illinois Newspaper Mechanical Conference: Seated, left to right—President, J. Lee Moore, News-Gazette, *Champaign, Ill.; Secretary-Treasurer, Earl Anderson, Rockford (Ill.) Consolidated Newspapers. Standing, left to right—Member Board of Directors Harry Pottle, Western Newspaper Union, Chicago; Chairman Board of Directors H. M. Scott, Decatur (Ill.)* Herald *and* Review.

able with respect to production matters. With the smaller groups, a liberal amount of time is given to discussion of the so-called minor problems.

MACHINISTS' GROUP MEETING

The machinists' group numbering about 50 persons, met Sunday afternoon after the banquet with Harry G. Pottle presiding as chairman. Walter Severin, of the Intertype Corporation, exhibited a film entitled "Intertype Matrix Alignment System." The film presented a pictorial explanation of Intertype's alignment system with special regard to the bottom alignment of the descenders of the 18 and 24-point two-letter matrices in the auxiliary position. The film showed that the 14 point two-letter matrix is the nucleus of the Intertype alignment system. It also showed that the 18 and 24-point matrices align at the top with the 42, 48 and 60-point characters. Thus, these matrices can be used with the same mold body.

Following the showing of the film the chairman explained that having just previously listened to an address at the banquet by the Hon. Augustus E. Giegengack, on the Government Printing Office, he felt the urge to pay a tribute to the Linotype machine.

Mr. Pottle's tribute to the Linotype, which he had just prepared for Comptons Encyclopedia, was well received because of its comprehensive nature and concise preparation.

The cleaning of matrices and magazines by the Klean-O-Mat Process was the next subject for discussion. The cleaning of matrices with various kinds of acids and the possible dangers involved were discussed pro and con.

At the invitation of the chairman, Ray Johnson of Klean-O-Mat Corporation, told of the rigid tests conducted by Mergenthaler Linotype Co., Intertype Corporation and the New York Testing Laboratories. These tests, declared Mr. Johnson, showed Klean-O-Mat is safe.

The cleaning of escapements and keyboard cam frames by the Klean-O-Mat method was also discussed. Mr. Johnson said where large scale maintenance work is carried on it is possible to do this work on a schedule basis with efficiency and satisfaction.

KEYBOARD MAINTENANCE WORK

This led up to a discussion of Linotype-Intertype keyboard maintenance work. The high-light of this discussion was the occasional failure of a keyboard cam to fall on the rubber rolls in response to the touch of a key.

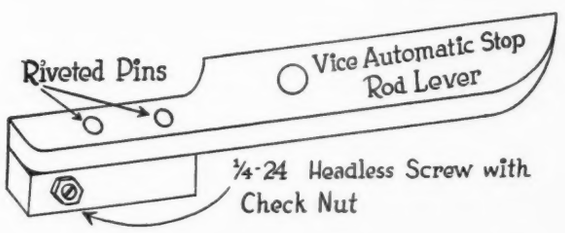
The thought expressed was that the cam yoke could be made a little heavier on the end opposite the hinge rod. The chairman told how he overcame this difficulty by repositioning the short lower reeds (H-2483) to rest on the ends of the cams. The weight at the end of the cams is ½ oz. and by letting these lower reeds rest on the ends of the cams another ¼ oz. is added, which seems to insure dropping of the keyboard cams.

He also explained that he slotted the screw holes in the banking bar (H-1226) that holds the short reeds, so that they could be raised when changing cam frames.

VISE AUTOMATIC STOP

The chairman announced that the next subject for discussion would be the Linotype-Intertype vise automatic stop with relation to stopping the machine when tight lines occurred, before the mold advanced too far and crushed the lower back lug of one or more of the matrices.

He showed how to expedite this adjustment without having to remove the vise automatic stop lever for bending each time it is necessary to take up lost motion on the occasional machine. He exhibited a vise automatic stop rod lever (E-201), to which a steel block, ⅜ in. by ⅜ in. by 1¼ in. had been fastened on the lower left-hand surface by two rivet pins. The block was drilled and tapped for a ¼-24 headless set screw with which a much finer adjustment for taking up lost motion can be made very quickly. The set screw adjustment is maintained by a check nut.



EDITOR'S NOTE—*This diagram represents a vise automatic stop rod lever (Intertype-Linotype) to which has been fastened the means for taking up lost motion between the vise automatic disk dog and the friction clutch so as to prevent the mold disk advancing too far against the matrix line when the operator has sent in a tight line. Not all machines have this faulty condition after long use, but some of them do develop lost motion in the parts. When the mold disk is advanced too far, the mold may cut or mash the lower front matrix lugs. Harry Pottle, Chairman of the Machinists' Clinic at the recent Illinois Newspaper Mechanical Conference, illustrated and described the adjustable screw idea.*

While the idea of eliminating lost motion in the vise automatic stopping mechanism is not new, the fastening of the block to the lever to which has been fitted an adjustable screw is not generally known. Many machinists take up the lost motion by bending the right side of the lever in a bench vise. In case either the lever is bent in a bench vise or the block is applied to the lever for eliminating the lost motion, the machinist first should be certain that his clutch adjustments are in good order as recommended by the manufacturer; the clutch buffer leathers should be dry *and* clean *to permit the leather buffers releasing freely when the machine is to be stopped automatically, and the vise automatic mold disk dog, dog spring and the stop rod pawl should also be in good order. When used to excess, the dog and pawl striking edges will be "chewed" or rounded off, thus making any adjustment impossible.*

When the machine has been stopped by the vise automatic, the rim of the mold disk should not have advanced more than 3/16 in. beyond the front edge of the mold disk turning pinion teeth.

Monotype Demonstrates New G-E Water-Cooled Lamp

ON THE evening of Tuesday, September 6, what is said to have been the first public demonstration of the new General Electric water-cooled mercury vapor lamp applied to equipment in the Graphic Arts was made at the factory of the Lanston Monotype Machine Company, in Philadelphia. The demonstration was observed by Monotype officials and department heads and by a number of prominent executives in Philadelphia lithographic and printing plants.

At that time a 3000 w. lamp, consisting of a group of three of the new G-E 1000 w. bulbs assembled in a glass tube through which water was constantly circulating, was used to demonstrate both the lamp itself and its use with the new Direct Projection attachment of the Monotype-Huebner Overhead Camera.

For this demonstration a 6 in. by 8 in. 133-line halftone screen negative was used to project an enlarged image 43¼ in. by 57½ in. on the sensitized press plate mounted on the vacuum back in the darkroom of the camera. Two 14 in. condensers and an 18 in. Zeiss Apo-tessar lens were used in making the projection.

The lamp produces a brilliant white light of constant intensity, resulting in clearer and sharper reproduction, with a saving in time required to complete exposures on press plates expected to run from 25% to 50%. The water-cooling is made necessary by the intense heat generated by the lamps.

The application of this form of lamp to the Graphic Arts industries was the direct result of consultations between R. E. Farnum, General Electric lighting engineer, and Wm. C. Huebner, Monotype engineering counsel. The preliminary experiments in the use of the new lamp were carried on by Mr. Huebner in Huebner Laboratories, New York. The demonstration in Philadelphia of actual use of the lamp was made in an M-H Camera, with Direct Projection and other special attachments, which had been purchased by the Western Lithography Company of Los Angeles. This equipment, including the lamp, has since been shipped to the purchaser. E. L. Brewer of the Western Lithography Company participated with Monotype engineers in making the demonstration.

Mr. Huebner and Monotype Company engineers are now arranging for the application of the new lamp for use in making plates on photo-composing machines, vacuum printing frames and exposing gravure cylinders, as well as for use in direct projection and other similar operations.

Callahan Testimonial Dinner

Over two hundred Craftsmen and friends of John M. Callahan took part in a Testimonial dinner in tribute to his election as President of the International Association of Printing House Craftsmen, Saturday evening, September 24. at Hotel Alms, Cincinnati. Representatives from Craftsmen's Clubs in Dayton, Columbus, Indianapolis, Cleveland, Detroit, Chicago, Pittsburgh, Milwaukee, Racine, Newark, Philadelphia, New York and Washington were present.

On behalf of the Cincinnati Club of Printing House Craftsmen, T. C. Dorl presented Mr. Callahan with an honorary life membership in his home club, and Mayor James G. Stewart, Cincinnati, presented Mr. Callahan with an oil painting by the Cincinnati artist H. H. Wessel. Lee Augustine was toastmaster for the evening.

Specimen of 72-point Caslon Old Face Italic cast on the All-Purpose Linotype from individual matrices. Caslon Old Face Italic is available for the All-Purpose Linotype in all sizes from 18 to 72 point, and Caslon Old Face from 18 to 84 point.

Assumes New Duties

On September 1, George F. Morrison assumed the duties of vice president, treasurer and general manager of sales of the Milwaukee Saw Trimmer Corporation, Milwaukee, Wis.

George F. Morrison now with Milwaukee Saw-Trimmer Corporation.

For a number of years he represented Imperial Type Metal Company, and was until recently with Duplex Printing Press Company. He will reside in Milwaukee.

THE FIRST PRESS TO START IN THE MORNING
The correct oil film to each individual bearing... automatically
American Type Founders
17 x 22 "Kelly" Printing Press
BIJUR
AUTOMATICALLY Correct LUBRICATION
● Machines equipped with BIJUR AUTOMATIC LUBRICATING SYSTEMS waste no time! Start your machine . . . automatically the proper oil film is metered to each bearing . . . whatever its type, location, speed, load. No forgotten bearings . . . no excessive feed to spoil work or waste oil. BIJUR . . . the modern aid to maintained accuracy . . . longer machine life . . . quality output . . . uninterrupted production . . . safety . . . reduced costs!
BIJUR LUBRICATING CORPORATION
LONG ISLAND CITY NEW YORK
741

CLOSING OCTOBER 24th!

ATF *Ideal Press Contest*

Hurry!

Open to: Pressmen, Press Assistants Apprentices, Feeders, Foremen and Superintendents

170 CASH PRIZES

GRAND PRIZE . $1,000.00

Second Prize		500.00
Third Prize		250.00
4th, 5th and 6th Prizes	each	100.00
7th, 8th, 9th and 10th Prizes	each	50.00
10 additional Prizes	each	30.00
20 additional Prizes	each	20.00
30 additional Prizes	each	10.00
100 additional Prizes	each	5.00

Hurry!

All entries MUST be postmarked not later than midnight, October 24 • Better mail yours TODAY!

$3,750.00 IN CASH PRIZES

ATF will pay $3,750.00 in cash awards for ideas on the most important features of letterpress equipment. Just tell us in your own words . . . from your own point of view what features you like most. We want to check the features of a new press . . . guide our efforts for the future. Your practical opinions are what we want. There's nothing to buy . . . read the few simple rules. But you'll have to act quickly . . . the contest closes at midnight, October 24, 1938. Get your Entry Blank TODAY!

DISTINGUISHED JUDGES

will select the winners

Hon. A. E. GIEGENGACK
U. S. Public Printer, who will act as honorary judge

GEORGE H. CORNELIUS
President, United Typothetae of America

THOS. E. DUNWODY
Director, Technical Trade School, Editor, The American Pressman

CLARK R. LONG
Past Pres., International Association of Printing House Craftsmen

● IMPARTIALITY:

Radio & Publication Contests, Inc., of New York City, an outside organization that has handled many of the largest contests in recent years, is handling ATF's *Ideal Press Contest*

1. Every entry blank received will be acknowledged.
2. Each contestant will receive a folder *"Results of ATF's Ideal Press Contest"* as soon as winners have been announced.
3. Neither contestant's name nor address will be known to the judges until after all the winners have been chosen.

● Three ways to get your Entry Blank

1. Ask or write your ATF Salesman.
2. Call or write to any one of ATF's 24 Branch Offices and Dealers.
3. Write to the "Contest Headquarters": American Type Founders, Elizabeth, N.J.

You will receive not only an entry blank but a helpful Guide Book which describes the important features of modern letterpress equipment. Ask or send for your entry blank and Guide Book TODAY.

RULES

AMERICAN TYPE FOUNDERS' IDEAL PRESS CONTEST ●

1. The American Type Founders' Ideal Press Contest is open to Pressmen, Press Assistants, Feeders, Pressroom Apprentices, Pressroom Foremen and Superintendents now employed in a job or commercial plant and operating any letterpress equipment, and to unemployed Pressmen, Press Assistants, Feeders, Pressroom Apprentices, Pressroom Foremen and Superintendents who have worked in a job or commercial plant and operating any letterpress equipment since January 1, 1937, and who reside in the United States. It is not open to employees of American Type Founders and their families, nor employees of its advertising and sales promotional agencies and their families.

2. The purpose of this contest is to determine the features of the ideal typographic press, *as they appeal to the practical man.* This will aid ATF in checking the features of a new press which is being developed, and provide a guide for future presses.

3. Contestants must use the official entry blank.

4. When you receive your entry blank, select the six features which you consider most important in a printing press. These should be determined from either a quality or quantity point of view, or a combination of both, depending upon the class of work which you usually handle. Number them in the order of their importance to you. For example: To one man, *accessibility* is the most important feature of a press. To another pressman, *ink distribution* is the big feature.

5. After numbering the six press features which appeal most to you, turn to the inside page and write a letter of not more than 200 words why you think the features you selected are the most important.

6. To aid you in selecting and numbering your list of features and writing your letter, ATF has prepared a Guide Book which you will receive with your entry blank.

7. Neatness does not count in this contest. Neither does literary ability. We are looking for practical ideas.

8. You may seek the assistance of your friends, but the answers and the letter must be yours, expressed in your own language.

9. American Type Founders will pay a first prize of $1,000.00, a second prize of $500.00, a third prize of $250.00 and 167 other cash prizes ranging from $100.00 to $5.00 to those contestants who, in the opinion of the judges, submit the most practical answers. In case of a tie, duplicate prizes will be awarded.

10. Fill in as many contest blanks as you wish, but you are eligible to win only one prize.

11. American Type Founders will not be responsible for entry blanks lost in the mail. No entry blanks, nor any material accompanying them, will be returned to contestants.

12. In fairness to all contestants, American Type Founders cannot enter into correspondence with any contestant. Study the Rules and Guide Book carefully as they will tell you how to proceed.

13. The decision of the judges will be final.

14. The contest opens on September 15, 1938, at 12:01 A. M., and closes on October 24, 1938 at midnight. All entries must be postmarked before midnight of October 24th.

15. All replies to this contest become the sole property of ATF, including all manufacturing, advertising and publishing rights.

AMERICAN TYPE FOUNDERS

200 ELMORA AVENUE, ELIZABETH, N. J. • *Branches and Dealers in 24 Principal Cities*

Types used: Franklin Gothics, Stymie Family, Kaufmann Bold

New Equipment and Supplies Announcements

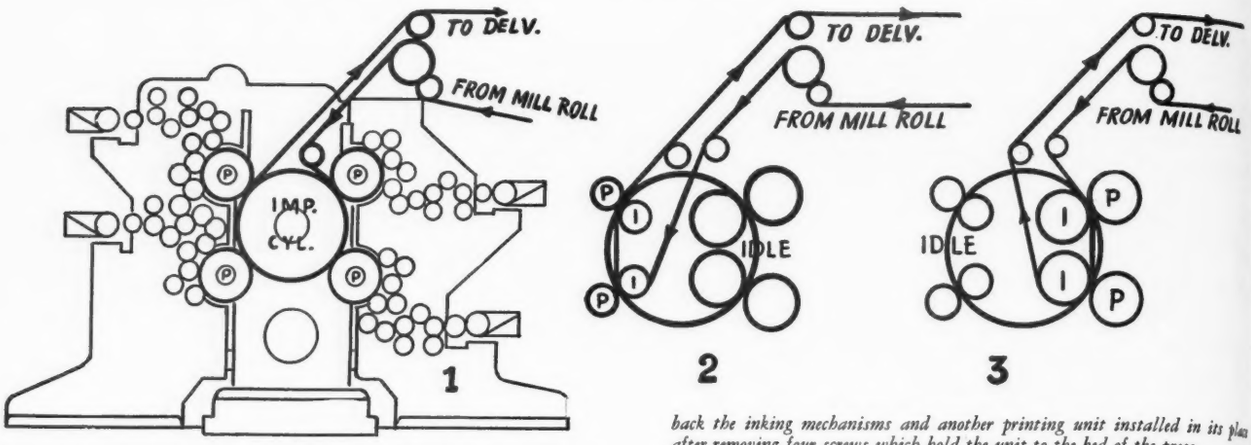
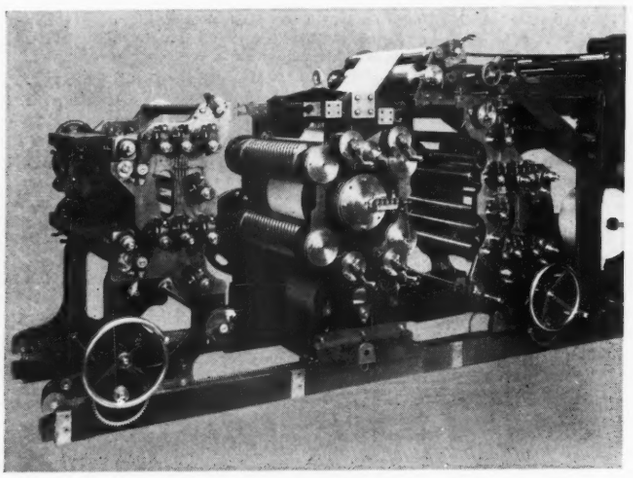


Fig. 1—Cross-section diagram of Meisel All-Size Four-Color Rotary Printing Press with inking mechanisms racked up to the plate cylinders. The four plate cylinders are grouped about the impression cylinder. This press is designed on the unit principle. The printing unit, consisting of plate and impression cylinders supported in frames, may be hoisted out of the press bed after racking back the inking mechanisms and another printing unit installed in its place after removing four screws which hold the unit to the bed of the press.

Figs. 2 and 3—These two diagrams show the arrangement of the printing cylinders in a unit which has been substituted for the unit shown in Fig. 1 on the Meisel All-Size Four-Color Rotary Printing Press. When one of the two color sections of the unit is in use, the other section of the printing unit is idle.

All-Size Rotary Unit Type Press

The Meisel Press Manufacturing Company made announcement recently of its 1939 Model All-Size four-color rotary printing press. The press is designed for printing on all types of paper, light card stock, transparent cellulose, glassene, etc. The press is designed upon the unit principle. The printing unit, consisting of the plate and impression cylinders supported in frames, may be hoisted out of the press bed and another printing unit installed in its place after removing four screws which hold the unit to the bed of the press. To make the unit accessible for removal and replacement, the inking mechanism is racked away from either side of the printing unit as shown in the halftone illustration.



View of 1939 Model Meisel All-Size Four-Color Rotary Press with both inking mechanisms racked back from the printing unit.

It is pointed out that the interchangeable printing units permit making ready a unit off the press by mounting plates and applying packing to the impression cylinders. In an emergency, the press may be stopped on a run, the unit hoisted out of the press and the made-ready unit put into place in the press ready for operation on another job in a half-hour. Another advantage of the unit design is that a unit may be undressed and washed after it has been removed from the press. In this way, the press may be started on productive work without delay as soon as a new printing unit has been installed in the press.

Besides printing four-color work from roll to roll or from roll to sheet, a unit may be substituted which will print two colors in two different sizes. The arrangement of the printing cylinders is shown in diagrams 2 and 3, the regular four-color unit being shown in diagram 1. When one of the two color sections of the unit (as shown in diagrams 2 and 3) is in use, the other section of the printing unit is idle.

Paper speed through the press ranges from 300 to 500 ft. per minute according to the nature of the work. Any width units can be provided. The width is governed by circumference of plate cylinders. For the roll-to-sheet printing operation, one gear change only is required to determine the size to which the sheet is to be cut from the roll.

On this type of press, the impression cylinder is provided with interchangeable bars—one solid for continuous printing and one with a slot for reel rod. A packing sheet roll is mounted within the frame underneath the impression cylinder.

Variable stroke and multi-speed vibration is provided in the inking mechanism by means of which the speed and length of stroke may be regulated.

The various new ideas are patented or patent pending.

Automatic pressure oil system is provided for lubricating the bearings.

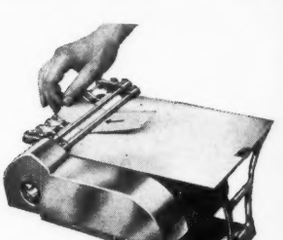
Further information may be obtained from the Meisel Press Mfg. Co. direct, or in care of *Printing* Equipment *Engineer.*

P-Double-E File No. 5LL32.

Pasting Machine for Moistening Packing Strips

The Potdevin Label Paster shown in the illustration may be used for applying adhesive to felt packing strips on stereotype mats. In practice, a felt packing strip which is to be moistened or to which wet adhesive is to be applied, is passed to a guard under which is a revolving roll carrying the adhesive. The strip is automatically passed over the roll.

The 6 in. Potdevin pasting machine is equipped with a 1/20 h.p. G.E. motor operating from the light circuit. The machine is belt-driven, operating a roll revolving in the adhesive and which transfers the adhesive under pressure of the feed rollers to one surface of the packing strips, leaving the opposite side neat and clean.



Potdevin Label Pasting Machine used for applying adhesive to stereotype packing strips. Pasting unit removable without tools for cleaning.

The adhesive coating is controlled by means of a scraper which removes excess adhesive from the roll. A numbered dial adhesive regulator permits the operator to select the desired amount of coating.

Further information may be obtained from Potdevin Machine Company direct or in care of *Printing* Equipment *Engineer.*

P-Double-E File No. 6M4.

A NEW ACHIEVEMENT

presenting Ideal O-X Process Rollers

The newest Ideal Roller is a process base as soft as composition!

When coated and coolly operating in your high-speed press, its ability to ink properly reflects itself in impressions that are clean, sharp and uniform. No color value is lost due to generated roller heat.

Your worries about ink tone values being lost while running; concern as to having fresh rollers for particular jobs; doubts as to whether or not rollers will last through the run—all of these are wiped away when you install Ideal O-X Process Rollers.

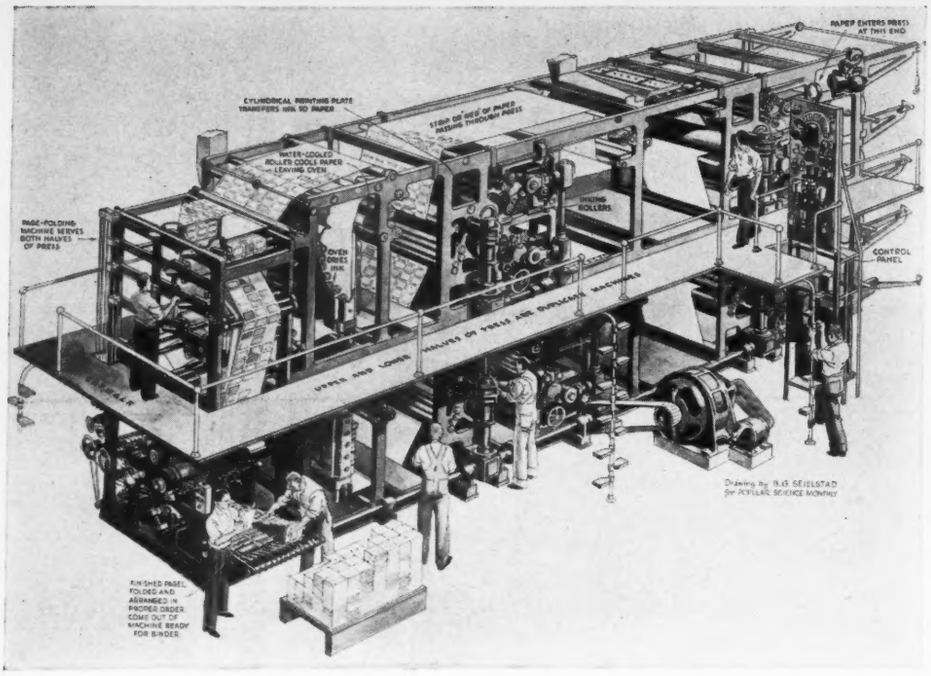
The outer coating of O-X Process Rollers is removable in hot water and a fresh new coating is applied in the matter of a few minutes. Think of the advantage this affords you on rollers which must be sectioned for split-fountain work. It means that you can section only the coating and that, when this is removed, the roller can be recoated for plain use again or, if you desire, the same or a different placement of sections can be made.

Coating can now be done in your own plant with the new Junior Model Ideal Process Surfacing Machine, which handles rollers from 2 to 3¾ inches in diameter with an over-all length of 84 to 86 inches.

Why *wonder* if these Ideal O-X Rollers are the rollers for your plant? Write or call the nearest Ideal representative, or send your inquiry to either of the conveniently located Ideal factories.

IDEAL ROLLER & MANUFACTURING CO.

CHICAGO, ILLINOIS *Branch sales offices in principal cities* LONG ISLAND CITY, N. Y.


PAPER ENTERS PRESS AT THIS END
CYLINDRICAL PRINTING PLATE TRANSFERS INK TO PAPER
STRIP OF SIDE OF PAPER LEAVING THROUGH PRESS
WATER-COOLED ROLLER COOLS PAPER LEAVING OVEN
FOLDING ROLLERS
PAGE-FOLDING MACHINE SERVES BOTH HALVES OF PRESS
OVEN DRIES INK
CONTROL PANEL
UPPER AND LOWER
FINISHED PAGES FOLDED AND ARRANGED IN PROPER ORDER COME OUT OF MACHINE READY FOR BINDER

Artist B. G. Seielstad created this perspective drawing of the McCall Publishing Company's new Goss color magazine press upon which the new size Popular Science Monthly *is printed. It is said to be the world's fastest two-color magazine press. Press is equipped with Selas driers and four sets of driven water-cooled rollers. Gas-fed fire reaches a temperature of 2200 deg. but the paper is not even scorched when passing through the drying units—it's temperature never rises above 180 deg. Plate cylinders are solid steel forgings 55 in. circumference. More than 2,000,000 pages are printed in the press in 60 min., enough, if placed length-wise to form a ribbon of printed and colored paper reaching from New York City to Norfolk, Va.*

Goss Press Prints New Size "Popular Science Monthly"

What is said to be the world's fastest two-color magazine press is now producing the new-sized *Popular Science Monthly* at the Dayton, Ohio, plant of the McCall Corporation. This press was designed and built by The Goss Printing Press Company, Chicago.

This new Goss Magazine Press consists of four high-speed magazine printing couples, with three color units. One color unit is on each side of the lower deck, and one color is on the first impression cylinder on the upper deck. Provision is made for a fourth color unit on the second impression cylinder of the upper deck. This press also is equipped with combination pin point gripper jaw fold magazine folder with double delivery, three pages wide. It is approximately one-fifth of a block long and more than one story high, 48 ft. in length and 16 ft. in height.

At full speed this Goss press prints the magazine in less than half a second. While the average person is pronouncing the name *Popular Science Monthly*, the press will print three booklike copies of this publication. More than 2,000,000 pages are printed in the giant machine in sixty minutes, enough, if placed length-wise, to form a ribbon of printed and colored paper reading from New York City to Norfolk, Va. Approximately 200 ft. of paper, nearly 5 ft. wide, is running through the press at one time.

Gas-fed fire that reaches a temperature of 2200 deg. F. plays over the paper as it passes through Selas driers to dry the ink, but is not even scorched. Its temperature never rises above 180 deg. Four sets of driven water cooled rollers complete the drying facilities.

A curious feature of the turning bars, which carry the sheets downward into the folder after they are run through the main press, is that the paper rides over them on a layer of air. Tiny holes perforate the polished rods. Out of these holes, compressed air is forced at the exact pressure necessary to hold the paper a fraction of an inch above the metal and eliminate all possibility of smudging the printed pages. Instead of turning on rollers, the paper turns on a rolling layer of air.

While the upper unit of the press is printing one part of the magazine, the lower unit is printing another. Plate cylinders are solid steel forgings 55 in. circumference. The width of the paper roll is 58½ in.—to produce an untrimmed size of 6⅞ in. by 9¾ in., trimmed sides open, at a running speed of 11,000 cylinder revolutions per hour. Plate cylinders, when completely filled, hold 24 plates, each plate containing 2 pages of the signatures. After passing over the first plate cylinders, the sheets are reversed so the other sides are printed in passing over the next cylinders. At the end of the press, the sheets are cut into strips as wide as a page of the magazine is long.

In the folding mechanism, these strips are cut and stacked into signatures, or series of consecutive pages. The final step in manufacture is accomplished by another machine. It places the signature in order and binds them between covers to produce the magazine as you see it.

Special elastic glue is used for binding. It does not lose its pliancy when dry, holds the pages together and permits the magazine to lie open like a book.

The 500% increase in the number of color pages required the installation of special features in the new press. Grooved cylinders aid in the work of getting color plates in register. Plate cylinders are equipped with the Goss quick hand-impression throw-off arrangement, by means of which the plate cylinder can be thrown clear of the impression, the eccentrics being equipped with the Goss locking device which locks them solidly into the frame in the direction of the load.

Each second impression cylinder is equipped with the latest design oil offset arrangement, the oil fountain being so constructed that its body can be easily detached for cleaning. At the delivery end of the press, a battery of knobbed rods permits the shifting of the paper to right or left at any point during a run. In addition, special tension rollers keep the paper ribbon flowing smoothly between the plate cylinders without jerking or see-sawing.

Two double paper roll arrangements for handling the web into the press are attached opposite the folder, each arrangement being equipped with a paper feeding device and Goss automatic tension arrangement for properly feeding the webs into the printing units.

P-Double-E File No. 5LL24

Webendorfer Offset Jobber

The new Webendorfer Offset Jobber sponsored by Webendorfer-Wills Company, is made to take a maximum sheet size of 14¼ in. by 18½ in. Maximum printing sizes is 13⅞ in. by 17¾ in. Maximum plate size is 17 in. by 18 in., 0.009 in. thick. The press is arranged to accommodate a 7 in. by 9 in. plate which can be put directly into a typewriter for typing.

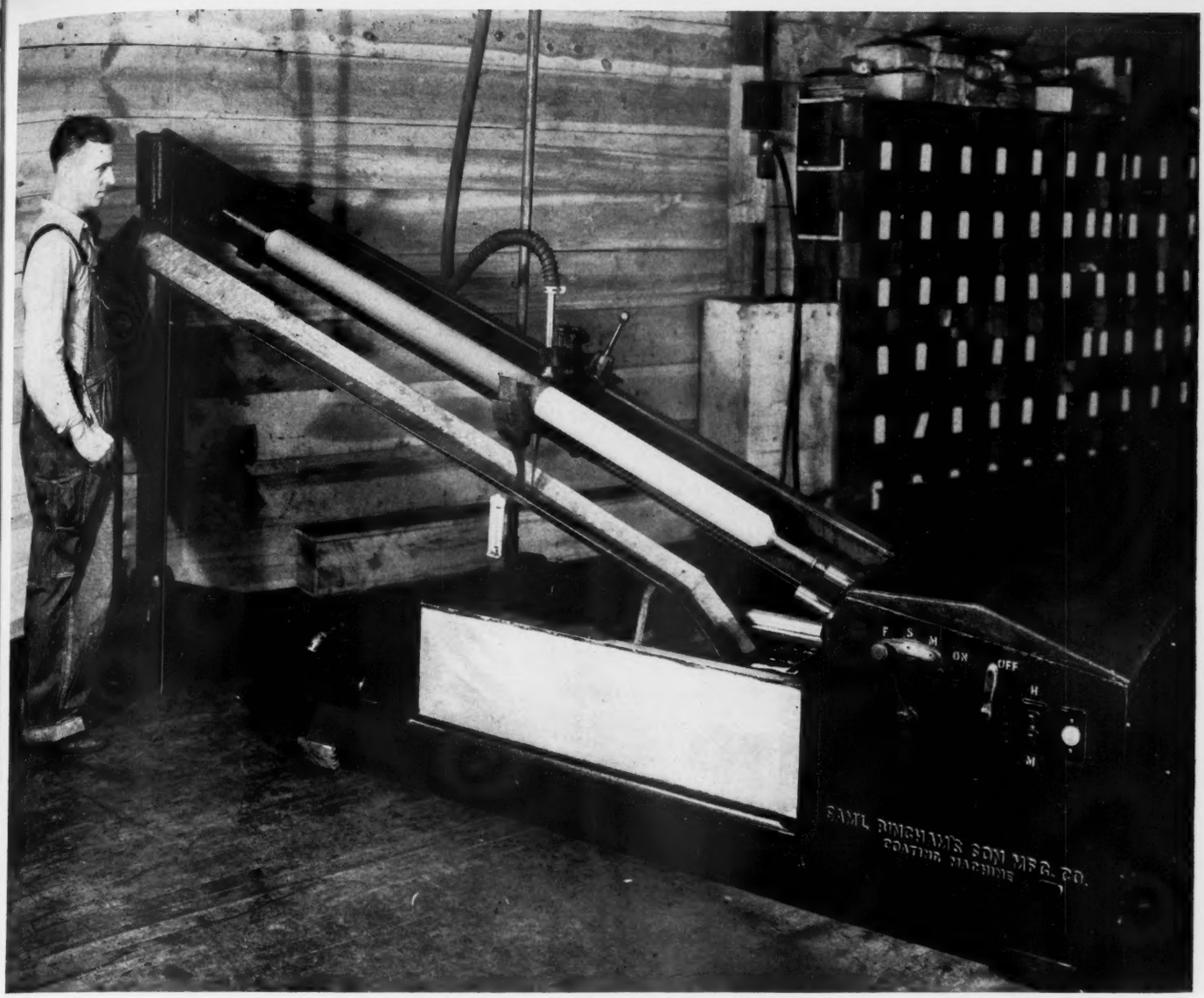
The vacuum air feeder may be operated independently of the press. The feeder takes approximately 18 in. of stock and the pile delivery handles the same amount. Extension pile delivery as shown in the illustration or a chute delivery may be secured.

Manufacturer states the ink distribution is ample for handling a general line of commercial printing.

Anti-friction bearings are used wherever possible. A ½ h.p. motor operates the press and a 1/3 h.p. motor is furnished for operating the feeder.

P-Double-E File No. 2D24.

View of new Webendorfer Offset Jobber. Maximum printing size is 13⅞ in. by 17¾ in.



A PERFECTED DEVELOPMENT

BINGHAM'S ROLLER COATING MACHINE AND BASES

The bases are the regular roller cores belonging to the printing press covered with BINGHAM'S soft rubber compound, as soft as regular composition roller; or with their AMSON compound, very good, but not so urable as the rubber base; or with non-melt-ble composition, the least expensive to install ut more expensive to maintain.

The rubber base is guaranteed against defects f material and workmanship for four years; the AMSON base for eighteen months; and the omposition base for a season.

The BINGHAM coating machine as illus-rated above melts the composition being used, n an electrically heated and temperature-con-rolled tank; circulates it by a pump through a novable trough through which the base to be oated is rotated; and rotates the roller base as he trough travels its full length.

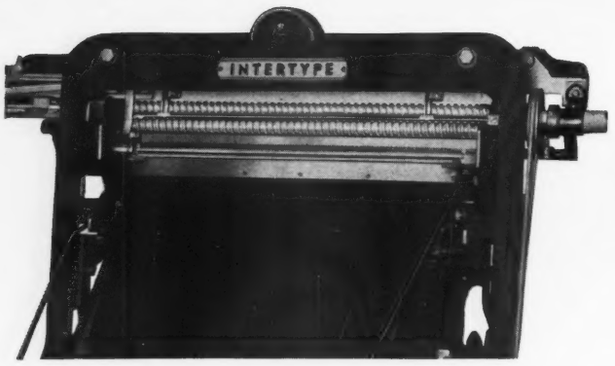
The result of the operation is a soft, springy roller with a perfect printing surface of composition, which surface can be washed off and renewed at nominal expense as often as the operator desires, a great advantage for split fountain work, as this surface only can be sectioned and when the work is finished the surface can be removed and the roller recoated for regular work or re-sectioned for the work to be done.

These machines are not sold. They are installed on an installation and inspection charge of $100.00 per year for the single coating machine, or $150.00 a year for the double coating machine, one that coats two rollers at a time. They will do all that any other machine will do and more rapidly and more perfectly.

For facts and estimates get in touch with one of our factories or accredited agents.

SAM'L BINGHAM'S SON MFG. CO.

LANTA
ICAGO
CLEVELAND
NASHVILLE
DES MOINES
DETROIT
DALLAS
HOUSTON
INDIANAPOLIS
KALAMAZOO
KANSAS CITY
ST. LOUIS
MINNEAPOLIS
PITTSBURGH
SPRINGFIELD, O.
OKLAHOMA CITY



View of Distributor Signal Lamp and housing mounted on Intertype. As long as matrices have not dropped from the distributor bar or bars the Neon lamp remains illuminated to warn operator not to change magazines.

Intertype Distributor Signal Lamp

Intertype Corporation has announced development of a Distributor Signal Lamp. The purpose of the device is to inform the operator whether all matrices have been distributed from the distributor bar when he is about to change magazines, so as to prevent matrices distributing from one magazine into another magazine such as would be the case if the operator made a magazine shift before all matrices had dropped from the distributor bar.

The signal lamp is applicable to both single-distributor and mixer type machines and is automatic in operation. For a.c. current, the device consists of two transformers, a lamp housed in suitable casing and mounted centrally above the distributor bracket in view of the operator, a switch operated by the distributor shifter and suitable line and ground wire. On both the single-distributor and mixer type machines the distributor bars are insulated completely from the machine.

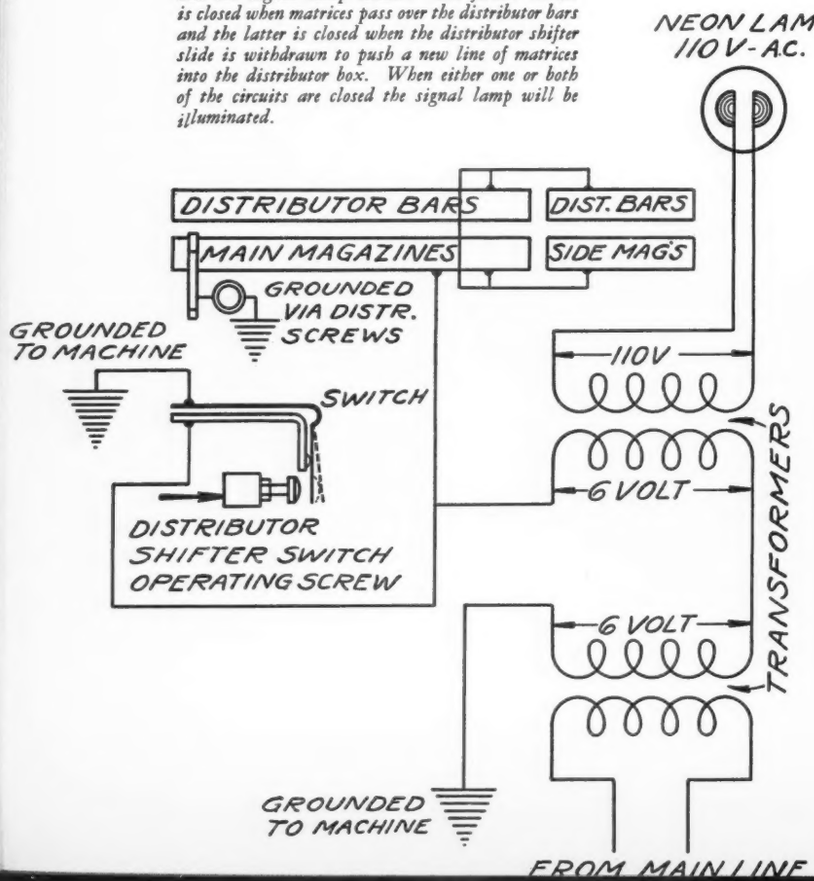
In a.c. operation, the lower transformer shown in the diagram reduces the 110 v. current to 6 v. for the circuit which is completed when matrices on the bar contact the distributor screws, the current passing through the screws and is grounded into the machine itself. As soon as the last matrix has dropped from the distributor bar, the circuit is broken and the lamp is extinguished.

The second transformer shown in the diagram steps up the current from 6 v. to 110 v. to illuminate the signal lamp. A Neon bulb is used which is more sensitive and has a much longer life than the ordinary filament bulb.

When the distributor shifter slide is retracted from its normal position previous to pushing a matrix line from the second elevator to the distributor box, a switch is closed which permits one of the circuits to be completed, thus illuminating the signal lamp. As soon as a matrix or matrices have been fed to the distributor bar, a second circuit is completed and the signal lamp is illuminated and remains lit until the last matrix has dropped from the bar. When the distributor box lift has raised the last matrix into the distributor the shifter opens the switch and the lamp remains "alive" until the last matrix has dropped from the distributor bar.

Diagram shows circuit for a.c. operation on Intertype's new distributor signal lamp which warns the operator not to change magazines until all of the matrices from the last line he has set have been distributed into the magazine. In studying this diagram, which represents a mixer machine with two distributor bars, note that the distributor bars are insulated from the machine.

There are two independent circuits; one, passing through the distributor bars and the signal lamp circuit and the other, passing through the switch and the signal lamp circuit. The former circuit is closed when matrices pass over the distributor bars and the latter is closed when the distributor shifter slide is withdrawn to push a new line of matrices into the distributor box. When either one or both of the circuits are closed the signal lamp will be illuminated.



For d.c. operation, a "rotary converter" is supplied. The size of this converter depends upon the number of machines to be served. Transformers can be furnished to step down the line voltage from 110 v. a.c. or 220 v. a.c. to the required 6 v.

This equipment, says Intertype, has been approved by the New York Underwriters' Laboratory.

Celebrates Anniversary

One hundred and nine paper merchants from all over the country attended the 50th Anniversary Celebration of The Martin Cantine Company which was held in the middle part of September at the Woodstock Country Club in Woodstock, N. Y. The delegates presented a handsome ship's clock, "guaranteed for another 50 years" to Holley R. Cantine, president of the Company. The presentation address was made by J. O. Bulkley, of Bulkley, Dunton & Co. Charles Walden, publisher of *Printing*, presented to Mr. Cantine a handsome portfolio which contained a letter from every Cantine distributor in the country.

W. & T. Vacuum Casting Box

The Westcott & Thompson Vacuum Casting Box, for casting stereotype plates, state its manufacturers, can be used in the stereotype foundry for the making of any type of plate—book, magazine or newspaper. Boxes are furnished for either curved or flat type plates. Each plate-casting unit is complete in itself and consists of casting box, motor and vacuum pump. The casting box is constructed to withstand heavy use and is precision machined to micrometric measurements.

The vacuum, state manufacturers, holds the mat firmly and eliminates flats in the cast and plates are free from blowholes; the perforated door and porous back sheet withdraw the gas while the metal is being poured; plates can be cast at low metal temperature and the plate is of uniform thickness within the variable tolerance thickness of the mat; shrinkage of mats cast is reduced to the minimum; boring of plates is eliminated, because in casting, an allowance of not over 0.005 in. is allowed for shaving the plate; register of the mats for color plates is made easy.

Information about boxes for casting curved newspaper color comic plates, magazine plates, salesbook and bag plates and for flat book plates is available upon request to the manufacturers direct or in care of *Printing* Equipment *Engineer*.

P-Double-E File No. 2G6.

Westcott & Thomson Vacuum Stereotype Casting Boxes are made for casting several kinds of stereotype plates. The one illustrated here is for casting magazine plates.

One of the precision machines used in the manufacture of Hi-Speed Quoins.

Prices Reduced

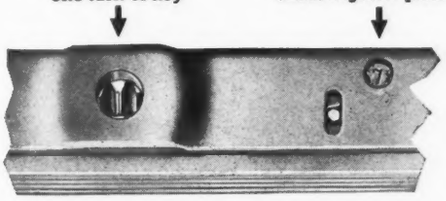
22% ★ Greatly increased sales and volume production have lowered manufacturing costs, so that . . . without any sacrifice of quality . . . Challenge now quotes new, 22% lower prices on

CHALLENGE Hi-Speed Quoins

Saving 70% to 80% on lock-up time, insuring accurate register and requiring no reglets, these steel, cadmium-plated quoins are self-locking, cannot slip, give square lock-up and prevent work-ups. Two Challenge Hi-Speed Quoins actually do the work of from 5 to 8 ordinary quoins.

Operates with one turn of key

Indicator shows exact register position



★ Write today for complete list of reduced prices on all six sizes of Challenge Hi-Speed Quoins!

THE CHALLENGE MACHINERY CO.
GRAND HAVEN, MICHIGAN
CHICAGO, 17 E. Hubbard St. ✦ 200 Hudson St., NEW YORK
Agents for Great Britain — Funditor Limited, London, E. C. 1

310

Lots of Readers Noticed—

that they could read paragraphs at a glance where labored eyestrain had once been the rule. Their talk produced more readers and more talk—in fact, a public state of mind that was reflected in advertising income.

Readers never hear about such things as dry mats, but Certified got a lot of anonymous credit, just the same.

For dependable stereotyping, rely on Certified Mats, made in the U. S. A.

CERTIFIED DRY MAT CORPORATION
9 Rockefeller Plaza, Dept. M
New York, N. Y.

Certified DRY MATS

Castype line-composing machine is made in two models. This is a view of office model. Casts 9-in. slugs for multigraph purposes. May also be used in producing copy in offset work. Shop model casts slugs for regular letterpress work.

Castype Machine

An automatic line-casting machine that employs a standard model typewriter for its keyboard has been announced by the Castype Corporation. Castype slugs may be used either for printing or multigraphing.

As each line is written on the typewriter, a line of type up to 9 in. wide is automatically cast by pressing a convenient key. Each page of typewritten copy becomes a page of new metal type for reproduction by multigraph on letterpress. Castype may also be used in producing copy for offset work.

When the operator detects a mistake in the line of typewriting, as it appears on the paper in the machine, the correction key is depressed to cancel the line up to that point. The operator then starts over again, correcting the mistake that was originally made. The sheet in the typewriter is an advance proof of the line before it is cast. Office and author's corrections are made the same way as with any other slug-casting machine.

Both right and left-hand margins of the column are lined up automatically. In other words, it is possible to make the left-hand margins straight on a standard office typewriter, but not the right-hand margin. Castype lines up the right-hand margin by means of spacebands.

Two models, designated as the Office and Shop units, are available. The Office model casts and justifies line slugs for multigraph work, each slug being ejected into proper position on a circular drum at the side of the machine. These low slugs can also be mounted for letterpress reproduction. The Shop model casts and justifies type-high slugs. Type-high slugs are cast with a groove on one side and a slot on the other. The groove of one slug interlocks with the slot of the slug next to it.

The matrices are punched in brass bands, each band containing a complete alphabet. When the operator punches a key on the typewriter, the band slides down to the proper letter. When the slug is cast, all the bands are pulled back to the starting position. There are enough bands to accommodate the ordinary line of typewriting. The matrix bands are used over and over.

Either pica or elite typewriter faces can be used. Changing the size of the type is accomplished by exchanging pattern beds by means of a revolving table. Newly designed typefaces for various kinds of composition are also available. Changing the style of typefaces is accomplished by exchanging the matrix strips at the top of the machine. Molds are furnished for two 2½, 3, 4, 5, 6, and 7-inch slugs.

Tabular work, such as printing columns, is automatically cast. The machine quads out automatically. Any line written on the typewriter may be cast as many times as desired without rewriting. The operator holds down the casting key for as many repeats as are needed to provide identical slugs for use on two or more presses where long runs are required for rush production. The machine will also cast two slugs at one time. On narrow-column matter, the operator can type across the sheet in the typewriter, thus completing two lines in one operation, and the slugs will be ejected into the tray in proper sequence.

Castype is operated by electricity. The machine is as quiet as any standard typewriter.

View of Elwell-Parker's Type F-11 Tiering, Tilting, Telescoping Fork Truck. Rated capacity, 5000 lbs.

Announces New Fork Truck

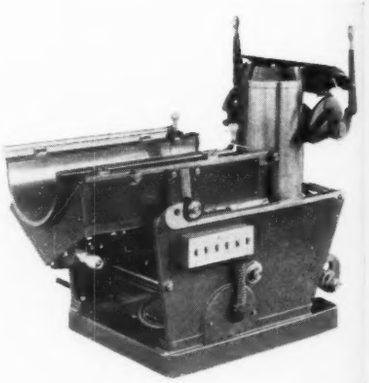
Elwell-Parker's type F-11 Tiering, Tilting, Telescoping Fork Truck has rated capacities up to 5000 lbs. and has four speeds forward and four reverse. The power circuit is closed and broken by a mill-type magnetic contactor electrically interlocked with the controller. Truck has two-wheel drive and four-wheel steer. Power plant is equipped with Elwell-Parker, 500% overload, heavy-duty and high torque motor. The motor being direct connected to free coasting worm and gear. All parts are easily accessible and design is such as to permit truck to travel over uneven floors without transmitting strains to mechanism.

Safety to men, machine and loads is emphasized in this truck. As an example, a dynamic brake supplements the travel brake and a solenoid brake on the hoist motor locks load in position unless released by the application of power. Regenerative braking supplements the solenoid brake and returns current to battery when lowering load. A ratchet protects the mechanism at the bottom of down travel of load and an electric clutch protects mechanism at the limit of up travel, and when overloaded. Forks stop automatically at either limit.

Complete information on this truck will be sent upon application to The Elwell-Parker Electric Company direct or to *Printing* Equipment *Engineer*.

Goss Vacuum Casting Box

Manufacturer announces that the new Goss 44-G Vacuum Stereotype Curved Plate Casting Box has been designed especially for producing and maintaining ideal casting temperatures. This casting box is equipped with a specially built insulated back for promoting greater uniformity of casting temperatures. Two large panels completely expose the vacuum chambers for cleaning purposes. The box is electrically heated, the units being automatically cut out by an adjustable thermostatic control. Ruby lights tell the operator when the units are in operation. Heating units in the side sticks eliminate chilling from this source.



View of new Goss Vacuum Stereotype Curved Plate Casting Box.

The core is equipped with the newly developed Goss automatically controlled water circulating system which pre-heats the cooling water to eliminate any tendency to chill. Backing paper is quickly applied to the core by a novel arrangement, so that a smooth surface is presented to the flow of metal. Special centering devices are built into the Goss Vacuum Curved Plate Casting Box, and thermometers are provided on both members to give greater control.

For regular newspaper work, double-cooled vacuum boxes can be supplied with automatic

A PERFECT PAIR FOR NEWSPAPER PRESSES

VULCAN PRESS BLANKETS

and

VULCOLASTIC INKING ROLLERS

FELT BLANKETS

Felt Blankets can be furnished regular or with polished surface (No. 73). Both types are highly resilient, uniform in thickness, free from bolstering and ghosting and very durable.

NON-FELT BLANKETS

Non-Felt Blankets are available, too, with an oil-proof polished surface. These blankets are especially good for pictures and solid blacks.

E. D. BLANKETS

These blankets also are very good for picture pages. They are used by one of the leading tabloids.

DRAW SHEETS

Vulcan Draw Sheets can be furnished regular or with polished surface. Can be used with various cylinder packings but are specially recommended for use with Vulcan Cork and Laminated Underpackings.

LAMINATED UNDERPACKING (No. 62)

For newspapers which prefer a rubber-like underpacking. Soft, resilient, and durable.

CORK (No. 76) UNDERPACKING

Used with felt and non-felt blankets and in draw sheet combinations. Does not crack or dry out and become hard.

VULCOLASTIC ROLLERS

Much softer than rubber rollers, Vulcolastic Rollers work best at a very light setting. They are entirely unaffected by inks, driers, temperature changes, etc. Vulcolastic Rollers forestall operating troubles and promote better distribution and better presswork.

VULCAN PROOFING COMPANY

58th St. and First Ave., Brooklyn, N. Y.

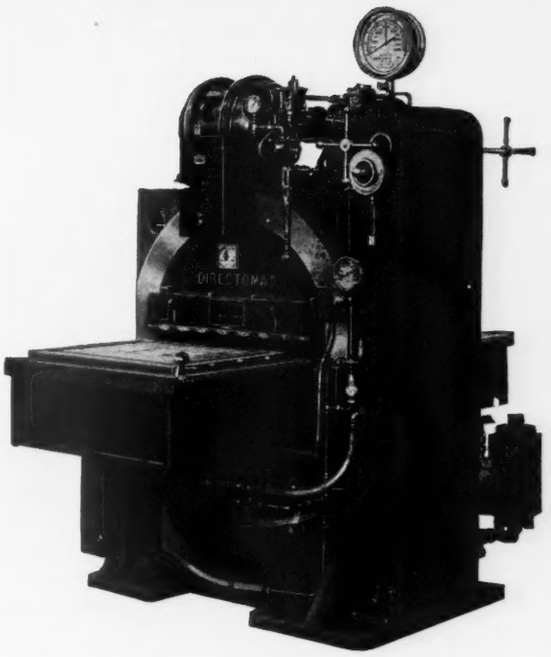
608 S. Dearborn St., Chicago

SALES REPRESENTATIVES IN PRINCIPAL CITIES

Buying? . . .

Look at and Compare all the features of

LAKE ERIE DIRECTOMAT



1. Twice as fast.
2. Saves space.
3. Eliminates stretch and distortion.
4. Instant, positive adjustment of pressure for various forms, mats and blankets.
5. Accurate register—no bolster marks.
6. Eliminates crushing weak slugs, electros, light face type and rules.

Proved and Approved by Critical Users from Coast to Coast

Lake Erie Stereotype Equipment Corp.

Buffalo, N. Y.

Please mail complete information on DIRECTOMAT performance and economies to my personal attention.

NAME..... TITLE.....

CONCERN .....

STREET .....

CITY .....

water circulating system and without the backing paper arrangement and electric heating units.

Further information is available on request to the manufacturer.

P-Double-E File No. 2G6.

Hand-Operated Precision Proof Press

Vandercook and Sons announce a new No. 2 Vandercook Precision Proof Press—an inexpensive machine for proving forms 23 in. by 24½ in. It will print a full size newspaper page and small automatic press forms in chases.

The new No. 2 Vandercook is made especially for small and medium size newspaper and

View of No. 2 Vandercook Precision Proof Press. Prints newspaper page or small automatic press forms in chase.

printing plants, where there is a demand for precision proofs, but where the investment must be small.

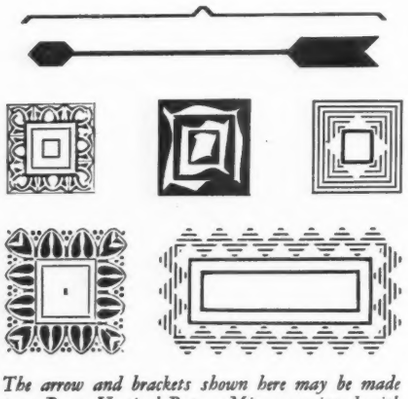
No. 2 Vandercook Precision Proof Press has a bed size 24 in. by 50 in. It will print a form 23 in. by 24½ in., and requires a 31 in. by 64 in. floor space.

Complete details may be obtained by writing the manufacturer.

P-Double-E File No. 1V.

Ornaments Easily Made

With the introduction of the original Rouse Vertical Rotary Miterer there were many venturesome compositors who produced interesting ornaments and borders from strip rule material. The more ingenious compositors, however, made such ornaments as the arrows and brackets shown here, the making



The arrow and brackets shown here may be made on a Rouse Vertical Rotary Miterer equipped with new Ornamental Border Stop attachment.

of which involved partially cutting through the rule. On the original Rouse Vertical Rotary Miterer experience and skill were required, as there were no markings or scales the compositor could use as a guide in making duplicate designs.

With the development of the New Ornamental Border Stop (an attachment for the Rouse Vertical Rotary Miterer), any compositor can quickly and easily make ornaments and borders, with the assurance that the same setting of the stop will always result in the same depth of cut, and duplicate designs may be made by maintaining a record of the necessary setting.

Specimen designs shown here may be made in a few minutes, even by the inexperienced.

Circular showing the Border Stop and other examples of its work will be sent upon request to the manufacturer, H. B. Rouse and Company.

P-Double-E File No. 1S.

New Variable-Speed Transmission

The Ideal "Select-O-Speed" Transmission, as illustrated, is furnished in sizes up to 7½ h.p. for use on presses or other printing machinery where variable speeds are required. Standard "V" belts only are used. It gives an infinite selection of speeds over a 5 to 1

View of Ideal "Select-O-Speed" Transmission which is furnished in sizes up to 7½ h.p.

or greater ratio by the movement of a control lever.

The "Select-O-Speed" is applicable to all machinery now operating at a fixed speed when a variable speed is necessary or desirable.

The variation of the speed ratio is made possible by the arrangement of two interlocking sheaves. These sheaves may be pivoted laterally by a slight movement of a control lever, thus changing the driving and driven belt tensions. This change automatically causes the sheaves to adjust themselves to a new pitch diameter for the new speed ratio, and give the infinite speed variation for proper machine control.

Manufacturer states it may be mounted on the floor, wall, ceiling, upside down or right side up and it works without noise or vibration in any position.

The Ideal "Select-O-Speed" Transmission described is made by the Ideal Commutator Dresser Co.

P-Double-E File No. 5KK.

Double Purpose Spray Solution

A new double-purpose solution for prevention of offsetting has been developed by The DeVilbiss Company to meet the special requirements of the carton printing industry. Containing paraffin as an added ingrediant, this solution lubricates the surface of the printed stock. This contributes to easy forming, and prevents scuffing or smearing of the ink in folding, shipping and handling operations.

Special compounding of the solution to give maximum offset protection, combined with lubricative qualities of the paraffin offers two distinct advantages to the carton printer. Maximum production speed of the presses may be maintained, states manufacturer, and spoilage of finished work in forming and handling is minimized.

Complete information on this new anti-offset solution, known as Type DPHS, may be secured from the DeVilbiss Company.

P-Double-E File No. 5EE.

Refinalloy System

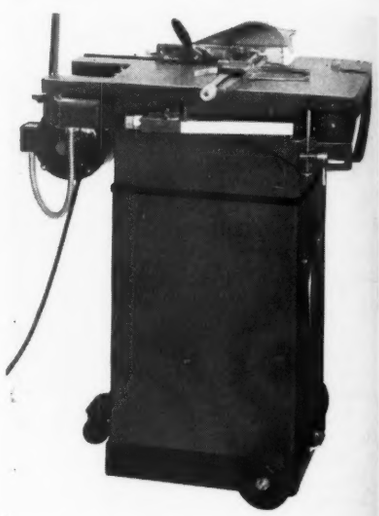
When type metal is manufactured, it is very nicely adjusted to specific formula. Constant remeltings disturb this nicely balanced combination and a readjustment of percentages of tin, antimony and lead is necessary from time to time.

The Refinalloy System, states its sponsors, the Kansas City Smelting Company, is designed to take care of this readjustment. When type metals are remelted small percentages of tin are lost. Carefully kept records covering a period of several years have disclosed that the loss of tin is directly proportional to its percentages, under normal conditions.

Refinalloy is manufactured in cartridge form. The tin in each cartridge will replace the amount of tin lost from 50 lbs. of line-casting metal through one cycle type to type. These cartridges may be added either at the remelting pot or at the composing machine. Each cartridge, it is said, contains enough flux to insure proper combination of the tin with the metal to which it is added.

Mobile Saw-Trimmer

To eliminate loss of time where facilities are not available and to expedite last-minute changes in forms, the Detroit Daily *News* composing room has been equipped with a new C&G Model No. 3-A Saw-Trimmer, manufactured by the Milwaukee Saw Trimmer Corporation. The saw cabinet has been equipped with rubber tired wheels as shown



in the illustration. The front base of the machine is fitted with two large wheels and the rear base is provided with a large swivel caster. The machine can be moved about the plant readily and due to the wheel and caster construction, it can be turned around in a comparatively small space. In addition to straight sawing, this machine is also equipped to handle the cutting of a complete range of angles, and a device is furnished for aligning odd indentions.

P-Double-E File No. 1Z.

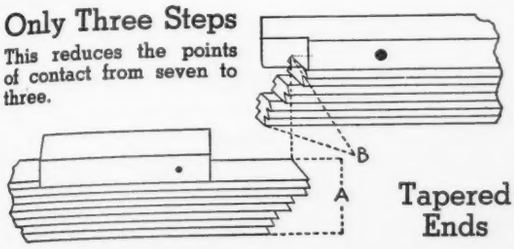
(Continued on Page 52)

THIS IS WHY BREAKAGE IS DISCOURAGED . . .

When Installation is Made of Our Improved Second Elevator and Distributor Box Bars.

Only Three Steps

This reduces the points of contact from seven to three.



Tapered Ends

When point (A) of second elevator bar rises to effect juncture with the distributor box bar the tapered end makes it *impossible to strike point* (B) of the distributor box bar, if either of these bars is out of proper position.

Just *one screw* holds the bar point in place. Think of all the time and trouble this saves.

These Bars can be set *closer* together. Closing the gap over which the matrices pass means *less wear* on the combinations. A very important reason for ordering a pair.

(*Descriptive Circular Available*)

RUBBER ROLLS

Recently a customer took the trouble to test the "gripping" qualities of various makes of rubber rolls. He confided to our representative that our Black Non-Blooming type came out first.

This of course was due to the great resiliency of the rubber compound used. The surprising fact about these rolls is that despite their softness, they are tough and long-wearing. They will not dull the teeth of the cams because they do not harden.

Ground or Corrugated—60 cents each in lots of 6. 70 cents each in smaller quantities.

ACE BELTS

Includes the Intermediate Drive—an endless —stretchless belt that requires no "taking up." Will last longer. Even the first cost is less, namely, only $1.90.

TRADE ★ MARK

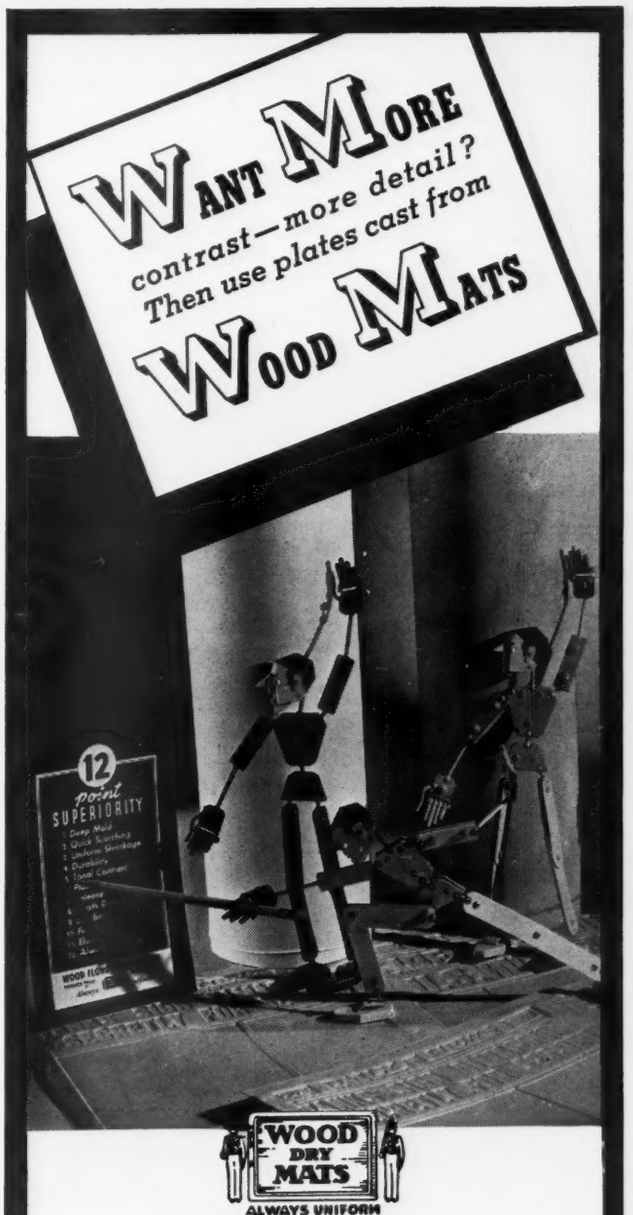
LINOTYPE PARTS COMPANY

NEW YORK, N. Y.
203 Lafayette St.

KANSAS CITY, MO.
314 West 10th St.

Chicago—318 West Randolph St.
Minneapolis—503 Fourth Ave. S.

Los Angeles — 1520 Georgia St.
Denver—1441 Blake St.



You'll find that you can hold those slippery, easy-to-lose middletones when you mold and cast with Wood Dry Mats.

The best test is actual use—so do as many stereotypers have done. Ask for a sample lot and watch your proofs for proof!

WOOD FLONG CORPORATION

HOOSICK FALLS, NEW YORK

Parisian Duplexed with Rivoli

Intertype announces the adaptation of Parisian duplexed with Rivoli in sizes 10 to 18 point. Specimen showing here also include additional sizes of Baskerville, Weiss Roman and Shadow.

INTERTYPE SHADOW 123

14 Point Shadow

This paragraph is set in 14 point Parisian duplexed with Rivoli

14 Point Parisian with Rivoli

ABCDEF abcdef 1234

ABCDEF abcdef 1234

18 Point Bakersville with Italic

ABCDEF abcdef 1234

ABCDEF abcdef 1234

18 Point Weiss Roman with Italic

Employment and Service

Employers, production and mechanical executives may insert notices in this department.

Items for this department may pertain to the following subjects: "Executive Wanted," "Association or Partnership Wanted," or "Position Wanted," readers referring to subjects of a personal nature such as obtaining information about addresses of executives, supplying copies of technical articles and magazines, patents for sale or requests for contacts for developing and/or financing of inventions.

Any reasonable request from an employer or mechanical executive for the printing of a notice upon a subject other than the ones listed above will be granted.

Notices may be printed under the following regulations: First insertion (maximum six lines) is free of charge. All subsequent insertions of the same item subject to a charge of 75c per line in advance.

Address all communications with box number to *Printing* Equipment *Engineer*, 1276 West Third St., Cleveland, O.

COMPOSING ROOM SUPERINTENDENT—Desires change; 17 years experience. Have been accustomed to 18 machine plant, Ludlow and Monotypes. Any location will be considered. You will not be experimenting. Reply Box 61.

NEWSPAPER PRESSROOM EXECUTIVE—Wants position in charge of daily newspaper pressroom. Thirteen years experience Familiar with standard and tubular equipment. Married, 29 years of age, will go anywhere. Reply Box 62.

Equipment Sales

Webendorfer Little Giant

Listed below are recent installations of the Webendorfer 12 x 18 Little Giant press: King Brothers, 208 N. Calvert St., Baltimore, Md.; Houston Domestic & Foreign Travel Service, 402 M & M Bldg., Houston, Texas; Gibralter Printing & Publishing Co., 800 Sixth Ave., New York; McKenzie Service, 95 Morton St., New Yrok; Mutual Printing Co., 1024 Arch St., Philadelphia, Pa.; Old Town Printing Co., 634 Race St., Philadelphia, Pa.; J. K. Jensen, Kinderkamack Road & Madison Ave., River Edge, New Jersey; Rush & Hebble, 546 S. Meridian St., Indianapolis, Ind.; General Publishing Co., McComb, Ohio; Globe Press, Osseo, Michigan; Technical Scales Co., 655 S. Wells St., Chicago, Ill.; Marcus Campbell Co., 3601 S. Michigan Ave., Chicago, Ill.; Whitsitt Printing Co., 13 East Twohig Ave., San Angelo, Texas.; Comfort Printing & Stationery Co., 107 N. 8th St., St. Louis, Mo.

Purchases Two Goss Giant Rollers

Two new Goss Giant Mat Rollers have been purchased by the St. Louis *Post-Dispatch*. These machines are electrically controlled, being equipped with two-speed d.c. motors and controls.

Installs New Linotype Equipment

The Reading (Pa.) *Eagle* has installed six Blue Streak Master Model 31 Linotypes and sixteen fonts of 7-point Linotype Excelsior No. 1 with Bold Face No. 2 for a new body dress. The *Eagle*, of which Hawley Quier is president and treasurer, now operates sixteen Linotypes. Edwin A. Quier is vice-president; William J. Rohn, secretary, and James E. Keller, general manager. Claude E. Schell is foreman of the composing room, and Harry F. Hassman is Linotype machinist.

Recent Linotype Installations

Linotypes recently have been installed by the Film Exhibitors Printing Co., Omaha, Neb.; Arrow Press, Cincinnati, Ohio; James J. Finn, Jr., Greenwich, Conn.; Haddon Press, Inc., Camden, N. J.; Fullerton Union High School, Fullerton, Calif.; Guzik Press, Inc., Chicago; Homer (La.) *News;* Mayville (N. Y.) *Sentinel;* Appleton (Wis.) *Post-Crescent;* J. D. Garnett, Lubbock, Texas; Workers Publishing Association, Inc., Chicago; Chattanooga (Tenn.) *Free-Press;* The Process Corporation, Chicago; Universal Printing, Dearborn, Mich. Vocational High School, Wilmington, Del.; Barmach Printing Company, Philadelphia, Pa.; Coryell County *News*, Gatesville, Texas; A.B.C. Printers, Fresno, Calif.; *The Searchlight*, the *Courier-Free Press*, and the Shasta *Courier*, Redding, Calif.; Kansas State Teachers' College, Pittsburg, Kan.; Atlanta (Ga.) *Journal;* The Press of Hollenback, Columbus, Ohio; Philadelphia (Pa.) *Inquirer;* Rockport (Texas) *Pilot;* Suburban *Times*, Des Plaines, Ill.; Cincinnati (Ohio) *Times-Star;* Geraldine (Mont.) *Review;* Adzit Printers, Port Arthur, Texas; Mt. Vernon (Ky.) *Signal;* Mocksville (N. C.) *Enterprise;* The Vermont *Standard*, Woodstock, Vt.

Newspapers Install Ludlow Equipment

Ludlows have been installed recently by the Burlington (Ia.) *Hawkeye-Gazette;* St. Petersburg (Fla.) *Times;* Frederick (Md.) *News;* *Novy Dennik*, Chicago Bohemian daily; and by the Scarsdale (N. Y.) *Inquirer*.

Newspapers Install Elrod Equipment

Elrod lead, slug, rule and base casters have been installed recently by the Okalhoma City *News;* Raleigh (N. C.) *Times;* Holland (Mich.) *Sentinel;* and by the Centralia (Ill.) *Evening Sentinel*.

Recent Hyroto Gravure Press Installations

The following firms as reported by Rotogravure Engineering Company, have installed 1-color Hyroto Gravure presses: U. S. Envelope Co., Springfield, Mass.; Carter's Ink Company, Cambridge, Mass.; Du-Tone Ribbon Company, New York, N. Y.; Reynolds Metals Co., New York, N. Y.; Aluminum Company of America, Pittsburgh, Pa.

Two-color Gravure Presses: Stark Bros. Ribbon Co., New York, N. Y.; Whiting-Patterson Co., Philadelphia, Pa.; Fibre Cord Co., Inc., New York, N. Y.; International Ticket Co., Newark, N. J.; Supreme Label Co., New York, N. Y.; Dominion-Envelopes, Ltd., Toronto, Canada.

Three-color Gravure Presses: Traver Corporation, Chicago, Ill.; The Royal Lace Paper Works, Brooklyn, N. Y.; J. M. Huber, Inc., New York, N. Y.; Bunte Bros. Candy Co., Chicago, Ill.; Vegetable Parchment Paper Co., Kalamazoo, Michigan.

Joins Tudor Typographers

Malcolm MacDonald, formerly of Maxon, Inc., New York, has joined Tudor Typographers, 305 E. 45th Street, New York.

Credit Memo Plan Now Working

A story in a recent issue of *The Linotype News* states that the "Mergenthaler Credit Memorandum Plan is now working for printers and publishers in all sections of the country. More and more printing and publishing executives are putting the plan to work for themselves and for the good of the industry as a whole. And more and more letters commending the Plan are coming to Linotype headquarters weekly—not only from printers and publishers who are availing themselves of its benefits but from other manufacturers both within and without the field of the graphic arts."

In its simplest application the Mergenthaler Credit Memorandum Plan, which was worked out by Joseph T. Mackey, president of the Mergenthaler Linotype Company, provides that the owner of an old typesetting machine may sell it outright to the Mergenthaler Linotype Company. In payment he receives a Credit Memorandum in the agreed amount. The Mergenthaler Company removes the machine from his plant and scraps it.

The Credit Memorandum is good, during a period of five years thereafter, for ten per cent of the purchase price of new products of the company, including new Linotypes of current model, matrices, magazines, molds, liners, spacebands and all parts and supplies made by the company.

The Credit Memorandum is negotiable, wholly or in part. It may be broken up into smaller units of twenty-five dollars or more, and any or all of the units may be sold if the owner so desires.

BURGESS CHROME MATS

BURGESS CHROME MATS

Those who care
secure their results
with

Burgess
Chrome Mats

•

CHROME MATS
A Laboratory Product Made in U. S. A.

•

Burgess Cellulose Co.
Freeport, Illinois

Pacific Coast Representative, RALPH LEBER,
426 Polson Bldg., Seattle, Washington

A346

BURGESS CHROME MATS

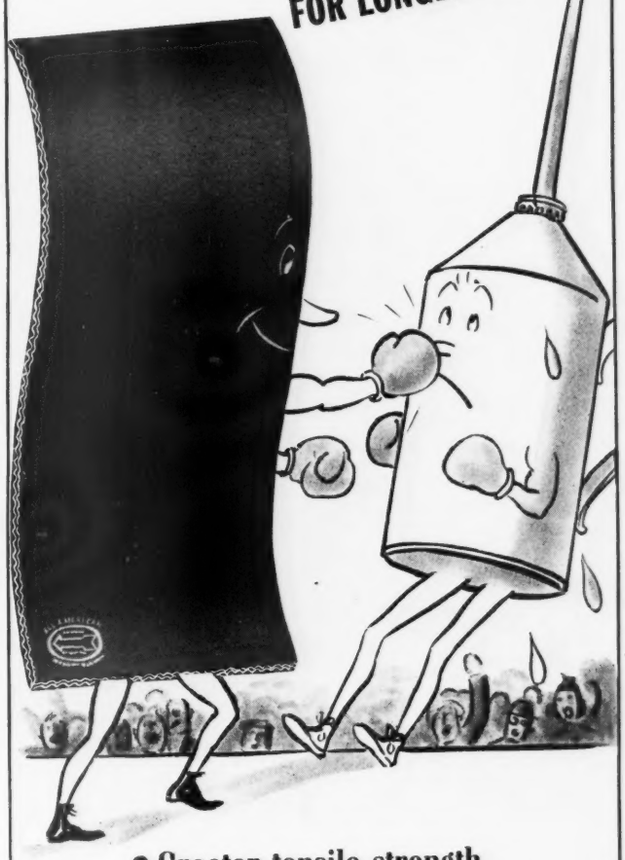
BURGESS CHROME MATS

BURGESS CHROME MATS

MERCURY BLANKETS

Oil Resistant Surface

FOR LONGER WEAR



- Greater tensile strength
- Free of blemishes and porosity
- Supersmooth surface
- Oil resistant surface and plies

RAPID ROLLER CO.

D. M. Rapport
President

26th at Federal St.
Chicago, Illinois

"Management—Open-Mouthed or Open-Minded"

AT the Boston convention of the International Association of Printing House Craftsmen, Robert S. Peare, Manager of the Maqua Company, Schenectady, N. Y., spoke upon the subject: "Management—Open-Mouthed or Open-Minded." *Printing* EQUIPMENT *Engineer's* report of Mr. Peare's talk, in the September issue, because of the "sin of garbling" did not convey the crux of Mr. Peare's message. In opening his address, Mr. Peare stated that some explanation of his subject was due his listeners because management is being besieged these days from all sides. One wing urges it to be more open-mouthed, to tell its story and prove thereby that it always has been right. The other wing is just as loud and insistent in the claim that management has always had too much to say and that what it should do now is shut up, by choice *or* force, and accept every idea thrown at it—prove its open-mindedness by acceptance of everything. Somewhere between these extremes must lie the course which will lead us to the results we all want.

Said Mr. Peare in part: "For many years I've heard eulogies of printing as an art . . . I would be the last to question that printing is an art . . . It is the same kind of art that a good steel casting is. The man who turned out that steel casting has checked it and found it good. It is up to the standard he has set for himself, it meets the customer's specifications and it will do the job required of it.

"In another respect it differs not one whit from the art we call printing. This steel casting which is a work of art to the man who made it is just a tool, or material for a tool, to the man who buys it. And the printing which we sweat over to make as fine as "the art" can produce is just a tool to the man who buys it . . . Now, I'm wondering why we can't retain this respect, even reverence, for our industry as one of the arts and still recognize the fact that it has to be turned out in a factory. Just like any other tool that is produced or fabricated . . . printing has to be made from raw materials, processed by skilled men and women, packaged and shipped. I would not seem to detract from the beauty of the printed piece or from the consummate skill of the printer or engraver . . . Let's just not get the feeling that we are making some priceless object d'art . . . Neither am I insinuating that it is possible to pour copy, art, type metal and ink into one end of a plant and have finished printing come out the other.

"Most journeymen detest what they call 'bookkeeping,' meaning the maintenance of production records, etc. I'm afraid they don't stop to realize that the records maintained are solely for the purpose of telling a story—to someone—a story which the journeymen know well but management can't possibly know because he isn't there when the incident happens. I have often felt that if the man actually doing the job looked at this 'bookkeeping' in this light he would not detest it so . . . But, I might also suggest that if all production records in industry were discontinued a lot of good printing would go out the window.

"Naturally, the management does the best job who has the best and most up-to-date knowledge of his plant, interprets the facts correctly and acts accordingly as quickly as possible."

Appoints Glenn Price

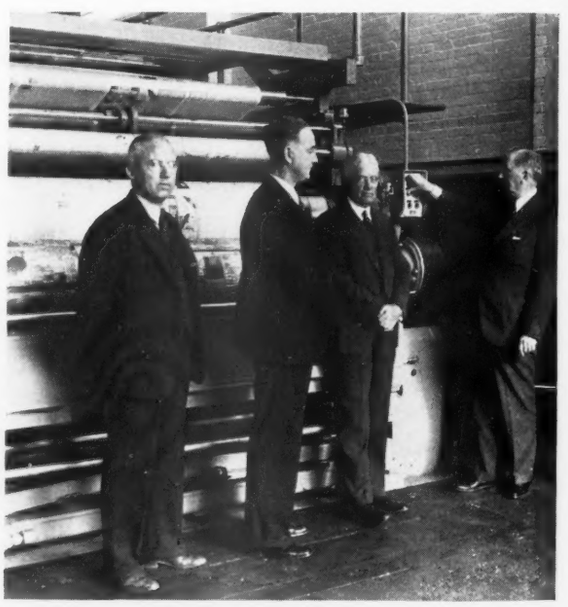
The Chicago School of Printing and Lithography has appointed the nationally known artist and designer, Glenn Price, as instructor of Design, Lettering and Layout. His work started with the opening of the Fall term on September 20. The Chicago School of Printing and Lithography has operated very successfully for the past twelve years under Executive Secretary O. R. Nelson and Director Lester A. Reppert. The school is under the supervision of a board of directors of which Mr. William H. Barnes of A. R. Barnes & Co., is Chairman and Fred J. Hagen of the Workman Manufacturing Co., is Chairman of the school committee.

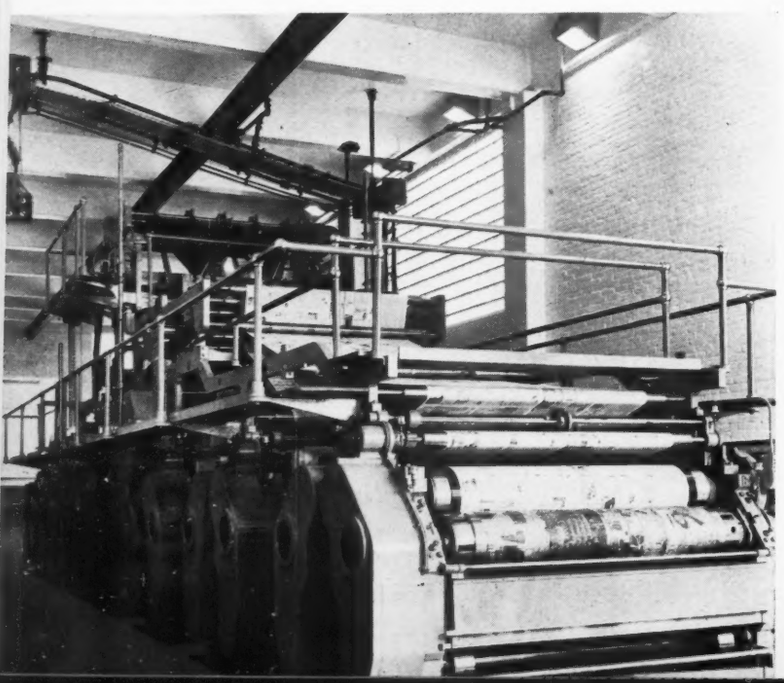
Reaches Crest of Modernization Program By Starting New Press

IN its papers published on September 14 and 15, the Worcester Evening *Gazette* and Morning *Telegram*, announced initial operation of its new Scott press which is housed in a recently completed two-story mechanical building. The starting of the new presses was the climax of a program of expansion and modernization started last February when ground was broken for the building of an addition to the plant. At that time a modern photo-engraving room was set up, equipped with the newest devices, including a Chemco camera. Other equipment installations in the modernization program await the arrival of new stereotyping equipment before the program will have been completed the first of the coming year.

The six Scott straight-line press units substantially increase the capacity of both the *Telegram* and *Gazette* plant. The presses are said to have a running speed of 60,000 48-page papers per hour. In addition a color cylinder permits the printing of r.o.p. color. Two 150 h.p. General Electric motors drive the presses.

In addition to the mechanical equipment, on the ground and basement floors, the second floor of the new building houses the library (morgue), ladies' lounge with kitchen facilities, circulation and art departments.

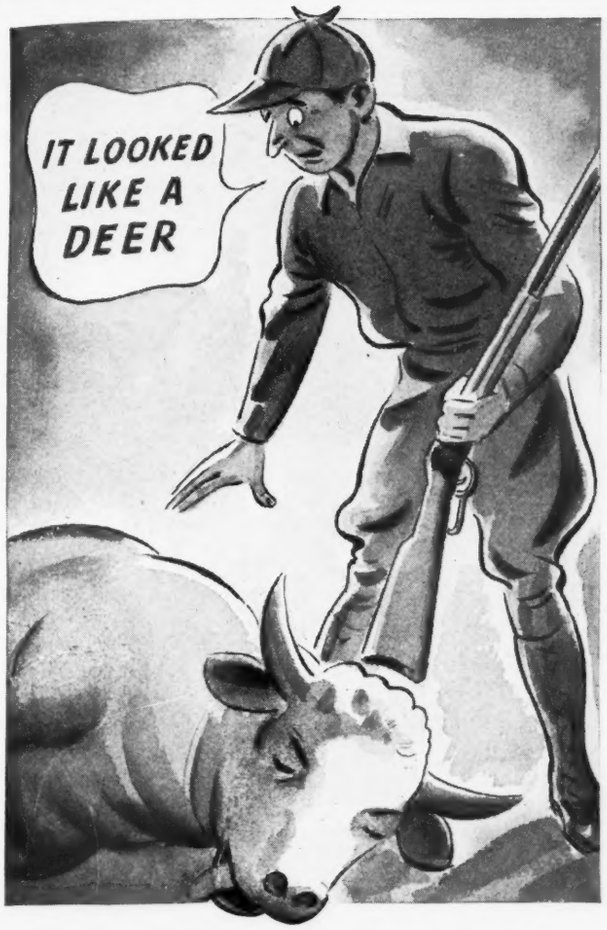




Publisher starts new run of first Scott 6-unit press in plant of Worcester (Mass.) Telegram *and* Gazette. *Left to right: Production Manager John J. Shea, Web Pressmen's Union President Gerald Nolan, President of the Telegram Publishing Company Harry G. Stoddard, and* (pressing the control button) *Publisher George F. Booth.*

Left: New Scott high-speed press recently completed and put into operation in plant of the Worcester (Mass.) Telegram *and* Gazette. *The press is housed in a new building. Note the glass block panels which permit daylight to enter the pressroom. For night operation, unit lights flood the pressroom. The public may view operation of the press from the front of the building through a large plate glass window* (shown in rear of the picture). *It is said that 60,000 forty-eight-page papers per hour may be printed on the new press.*

FAMOUS *Bad* GUESSES



● You may think your metal *looks* all right—but why not be sure? You can be positive about the condition of your metal if you use a dependable method of metal control. Proper control, such as Imperial's Plus Plan, keeps your metal in balance. To maintain this balance, under the Plus Plan, tin and antimony are added in exact amounts to replace the quantities lost in dross.

Printing plants by the thousands throughout the country that rely on the Imperial Plus Plan for metal control, benefit from minimum casting temperatures, low dross losses and lower yearly metal costs. Customers and readers appreciate the sharp, clear faces and cleaner impressions that accompany the other advantages.

Choose the Plus Plan for your shop—stop guessing about the condition of your type metal—worry less with Imperial. Write for complete details.

IMPERIAL TYPE METAL COMPANY

PHILADELPHIA • NEW YORK • CHICAGO • LOS ANGELES

Imperial

TAKES THE GUESS OUT OF TYPE METAL

Why We Advertise To You

We advertise Booth's Zink Cut Cement because, in the first place, we have a fine product and, secondly, because production and mechanical executives derive their income almost wholly from advertising revenue. We believe in being consistent.

The cost of advertising is a fair charge upon the printing industry. It's the power that keeps your job —and ours—going. Let's get together.

ZINK CUT CEMENT PRICES in the United States: 75c per largetube; $6.00 per dozen tubes; $5.00 per dozen tubes in gross lots. Stand-A-Lone Holders 2 for 25c, per doz. $1.00.

Booth's Green Rubber Keyboard Rolls

are made of as much pure gum rubber as it is possible to use in a product which must be resilient. These rolls are dependable for day-in and day-out service. When a keyboard cam contacts the roll, the cam simply must turn over.

A trial pair will cost you $1.30. The dozen rate is $7.00. These prices apply in U. S.

Sears Limited, Sole Canadian Distributors, Toronto, Montreal, Winnipeg, Vancouver. Canadian prices slightly higher to take care of import duties.

E. A. BOOTH RUBBER COMPANY

364 ROCKEFELLER BUILDING • CLEVELAND, OHIO

Patents

Recently Granted By U. S. Patent Office

Composing Machines:

2,127,467. MATRIX FONT DISTINGUISHER. Herman R. Freund, Brooklyn, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a corporation of New York. Application November 2, 1937, Serial No. 172,420. 18 Claims. (Cl. 199—40.)

1. In a typographical machine, the combination with a plurality of matrix face distinguishers and a matrix point distinguisher, of a font of matrices each provided with a plurality of notches in its bottom edge to cooperate with the respective face and point distinguishers.

2,128,369. SLUG ADJUSTER. Robert J. Lloyd, Detroit' Mich. Application May 16, 1938, Serial No. 208,270. 7 Claims. (Cl. 199—61.)

1. In a slug adjuster for typesetting machines comprising a bar, means pivotally mounted to the bar, one end being provided with means for horizontal adjustment of the bar to the machines, said first named means adapted for acrual movement and the end adapted to engage the slugs as ejected.

2,128,370. BRAKE SHOE FOR TYPESETTING MACHINES. Robert J. Lloyd, Detroit, Mich. Application May 16, 1938, Serial No. 208,271. 9 Claims. (Cl. 199—30.)

1. A brake for assembler rails of typesetting machines, comprising a lever, shoes detachably secured to the lever and spherical means mounted in the shoes adapted to bear on the top and bottom edges of the rail.

2,128,426. TYPOGRAPHICAL CASTING MACHINE. Richard R. Mead, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a corporation of New York. Application August 27, 1937, Serial No. 161,253. 20 Claims. (Cl. 199—52.)

1. In a typographical casting machine, the combination of a vertically movable line transporter, and two stop members for arresting the line transporter at different elevations, the two stop members being adjustable relatively so that one or both may be located in operative or inoperative position, as desired, one stop member supplementing the other when both are located in operative position.

2,128,775. MECHANICAL KEYING ATTACHMENT FOR TYPESETTING MACHINES AND THE LIKE. Karl Hoper, Berlin-Charlottenburg, Germany, assignor to M. Erich Blume, Leipzig, Germany. Application June 25, 1937, Serial No. 150,356. In Germany July 18, 1936. 4 Claims. (Cl. 199—18.)

1. In combination with a keyboard of a typesetting machine or the like, a unitary self supporting keying attachment for the keyboard, comprising, an operating mechanism and a stationary support for the latter arranged for independent mounting to one side of the keyboard and in fixed relation thereto and rigidly connected to the operating mechanism for normally supporting the latter in an operative position relative to the keyboard, the support being provided with a movable joint to permit movement of the mechanism from the operative position to another position for providing access to the keyboard.

2,129,164. TYPE CASTING MACHINE. Rutherford B. Chase, Chicago, Ill. Application August 23, 1937, Serial No. 160,432. 2 Claims. (Cl. 22—80.)

1. In combination with a type casting machine including a reservoir arranged to deliver molten metal thereto and a crucible pivotally mounted to the machine and adapted to feed molten metal by gravity to the reservoir, a float actuated valve for controlling the feeding of the metal to the reservoir, the valve and its actuating mechanism being mounted upon and carried solely by the crucible to swing out of operative position when the crucible is pivoted with relation to the reservoir, safety means for positively closing the valve before the crucible can be swung out of its operative position, and a lock for maintaining the valve in its closed position and against accidental opening while the crucible is outside of its operating position.

2,130,308. LINOTYPE SQUIRT GUARD. Walter J. Miller, New York, N. Y. Application October 12, 1936, Serial No. 105,307. 4 Claims. (Cl. 199—53.)

1. The combination with a machine for casting type bars, comprising a holder for type matrices, a mold cooperating therewith, and means for forcing molten metal into a mold, of a normally relatively stationary shield pivotally connected to the machine for covering the matrices and mold, the shield being substantially rectangular shaped and provided with transparent top, side and front walls.

Feeding, Folding, Delivery:

2,127,714. SHEET FEEDING MACHINE. Frank R. Belluche, Racine, Wis. Application October 28, 1937, Serial No. 171,508. 14 Claims. (Cl. 271—38.)

1. In a sheet feeding machine of the continuous type having a feed board to support a bank of sheets, separating and forwarding mechanism operable on the topmost sheet, and means for advancing the bank of sheets over the board; intermittent drive mechanism for the sheet advancing means to properly position the topmost sheet with respect to the separating and forwarding mechanism, the sheet advancing means being operable throughout a complete cycle of the machine so that the advance of the bank of sheets to the separating and forwarding mechanism is substantially continuous.

2,127,736. SHEET FEED MECHANISM. Joseph F. Jirousek, Cleveland, Ohio, assignor to The Chandler & Price Company, Cleveland, Ohio, a corporation of Ohio. Application May 3, 1935, Serial No. 19,688. 12 Claims. (Cl. 271—31.)

1. In an apparatus, suction-means for lifting and forwarding a sheet from a stack, blast-heads adjacent the upper edge of the stack, blast-openings in the heads directed against the edge of the sheet, valve-means for controlling a blast through the blast-heads in timed relation with the operation of the suction-means, and suction-means for further handling the forwarded sheet.

2,128,167. FOLDER. Godfrey H. Schmidt and Herbert C. Behrens, Battle Creek, Mich., assignors to Duplex Printing Press Company, Battle Creek, Mich., a corporation of Michigan. Application February 27, 1937 Serial No. 128,259. 26 Claims. (Cl. 270—71.)

1. In a folding mechanism having male and female cutting cylinders, the female cutting cylinder being provided with diametrically disposed tucker bars adapted to engage the center of a severed sheet carried by the cylinder, a rotatable member adjacent the cylinder, clamping jaws carried by the member adapted to grip the center of the cut sheet on the cylinder when in position opposite the tucker bar and withdraw the sheet from the cylinder and deliver it folded end first; and means for adjusting the gripping action of the jaws on the tucker bar.

2,128,981. SHEET HANDLING MECHANISM FOR WEB PRINTING ROTARY PRESSES. Howard M. Barber, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a corporation of Delaware. Application April 30, 1936, Serial No. 77,139. 2 Claims. (Cl. 271—64.)

1. In a sheet delivery mechanism, front and rear delivery piles, two sheet delivery carriers traveling in endless elongated paths and provided with sheet grippers, two sheet transfer rotary carriers and two oppositely disposed sheet transfer carriers traveling in endless elongated paths and having grippers operable to take the sheets from their respective sheet transfer rotary carriers and transfer them to the grippers of their respective sheet delivery endless carriers while the sheet transfer endless carrier grippers are traveling in right lines between the ends of their sheet transfer endless carriers, the sheet transfer endless carriers extending from points beneath their sheet transfer rotary carriers to points beneath their sheet delivery endless carriers.

2,129,618. WEB SUPPLY MECHANISM FOR PRINTING MACHINES. Albert J. Horton, White Plains, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York. Application October 11, 1935, Serial No. 44,485. 19 Claims. (Cl. 242—58.)

16. In a web supply mechanism, means to support one of a plurality of replacement rolls varying in diameter, with its axis in a determined position, movable means to deflect a running web toward the periphery of the replacement roll, and means positioned in accordance with the diameter of and by the replacement roll, to vary the web deflecting movement of the web deflecting means.

20,862. SHEET-FEEDER. Charles W. Harrold, University Heights, Ohio, assignor to Harris-Seybold-Potter Company, Cleveland, Ohio, a corporation of Delaware. Original No. 1,920,388, dated August 1, 1933, Serial No. 496,616, November 19, 1930. Application for reissue May 27, 1937, Serial No. 145,067. 46 Claims. (Cl. 271—30.)

1. In a sheet-feeder, sheet-forwarding means and suction means for separating and advancing a sheet from a pile to said forwarding means, said suction means being moved forwardly and downwardly beneath the sheet when said sheet is under control of said forwarding means.

2,130,841. DELIVERY MECHANISM FOR PRINTING PRESSES. William K. Eckhard, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a corporation of Delaware. Application June 9, 1936, Serial No. 84,269. 6 Claims. (Cl. 271—68.)

1. A flat sheet delivery comprising a sheet delivery carrier traveling in an endless path, a suction line, suction nozzles located within the path of the endless delivery carrier and arranged to be brought upwardly into contact with the undersides of the tail ends of the sheets as the sheets are being forwarded by the endless delivery carrier, and coacting mechanisms arranged to move the nozzles in endless paths to engage, depress and release the sheets.

2,130,659. PRINTING PRESS PORTABLE INK FOUNTAIN. Herman Wedemeyer, Detroit, Mich. Application August 14, 1936, Serial No. 96,076. 1 Claim. (Cl. 101—366.)

A removable ink fountain for printing presses comprising a vertical support removably mounted on a press, an ink reservoir supported vertically by said support, a reversible gear type pump mounted on said support directly under the reservoir, a manually actuated reversing valve connecting said pump and the reservoir, an outlet pipe connected to said pump and including an adjustable relief valve and an overflow fitting with its discharge disposed over the reservoir, an ink distributor connected with said pipe between the reversing valve and the relief valve, and a manually controlled clutch connected to said pump and including a detachable coupling for joining the clutch to the power means of the press.

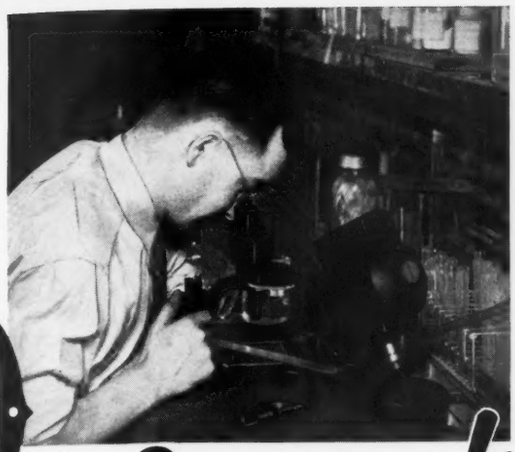
Wally Raasch, ATF's Cleveland Manager witnesses distribution of ATF Ideal Press Contest blanks by Jess Berkes, Manager of Caxton Company, in Cleveland. The contest closes October 24. To receive consideration, all entries must be postmarked before midnight on that date.

Left to right in this picture: John Newman, Assistant Pressroom Foreman; John Netzel, Pressroom Superintendent; John Knox, Composing Room Superintendent; Wally Raasch and Jess Berkes.

Miscellaneous:

2,126,967. NEWSPAPER COUNTING APPARATUS. Charles E. Lyons, Brookline, Mass. Application November 9, 1937, Serial No. 173,589. 7 Claims. (Cl. 271—63.)

1. Apparatus comprising a conveyor for receiving papers from a press, a circuit-closing device operable in synchronism with the conveyor, an electrically actuable mechanism, a circuit connecting the mechanism and the circuit-closing device, and a control device associated with the circuit including a switch means responsive to the passage of papers along the conveyor for conditioning the circuit so that electrical impulses can pass from the circuit-closing device to the mechanism to actuate the latter, the control device comprising two elements adapted to contact spaced portions of a paper moving along the conveyor and control two switches arranged in series in the circuit so that the circuit may be closed for actuation of the mechanism only when each of the elements is being contacted by a paper.



ON GUARD!

to maintain high quality... to meet new demands

Guardians of your peace of mind are the men who are constantly at work in the laboratory of the Atlantic Zinc Works. These men are assuring the dependability and protecting the reputation for highest quality which Zomo Electric Zinc and A-Z Alloy have always enjoyed. Every single sheet of these metals must pass exhaustive tests before being backed with our trademark and reputation.

•

Leading metal distributors in the United States, Canada and England carry stocks of these metals.

•

Have you any engraving metal problems?

The laboratory of the Atlantic Zinc Works has been helpful in solving many problems presented to us by perplexed engravers. If you are confronted with any difficulties concerning the behavior of your metal, we will count it a privilege to aid you in working out a satisfactory solution. Write to Atlantic Zinc Works, Atlantic Basin, Brooklyn, New York.

ZOMO ELECTRIC ZINC

A-Z ELECTRIC ALLOY

LINOTYPE MOLD DISKS REBUILT

Our patented process substitutes a steel ring in place of broken or cracked iron rim. We also true up warped and sprung disks in the process. Loans and exchanges arranged. Rebuilding charge is only $30.

MAGAZINES FOR LINOTYPES

This magazine (for models L, 4, 5, 6, 8, 14, 18, 19, 25, 26) represents culmination of ten years' constant improvement manufacturing magazines. It is light—20 pounds lighter than an old style magazine. We use duralumin for top plate and brass for lower plate. Resulting magazine has all best features with criticisms of none. It is light, yet rugged. $95 each for full length—$90 each in lots of six or more. Splits $80 each—$75 each in lots of three or more. Time payments arranged. Also sold by nearly all dealers.

NEW CATALOG

containing 108 pages, 8½ x 11, spiral-bound, is free for asking. Shows the many parts, accessories and repairs on which we can save you money.

MATERIAL WANTED

We buy, sell and trade new, used and rebuilt molds, magazines, fonts, Monomelts, motors, etc. Tell us of any surplus material.

•

MONTGOMERY & BACON

Towanda, Pennsylvania

PRESSES "KEEP ROLLING ALONG" WHEN EQUIPPED WITH

GELASTIC ROLLERS

Modern, high-speed presses — and slower, older models, too — turn out better work, with fewer costly press delays, when equipped with Vulcan Gelastic Inking Rollers.

Temperature changes have no effect on the Gelastic Roller — and its soft, resilient surface will not crack or chip, swell or shrink. It is also completely impervious to washes, oils, and driers.

Specify Vulcan Gelastic Inking Rollers—made by the makers of Vulcan Makeready Blankets — for more productive press time and for better all-around letterpress printing.

VULCAN PROOFING COMPANY

58th St. and First Ave., Brooklyn, N. Y.

2,127,246. EMBOSSING, PERFORATING, AND REWINDING MACHINE. Peter J. Christman, Green Bay, Wis. Application September 30, 1935, Serial No. 42,977. 2 Claims. (Cl. 101—23.)

1. In a machine, a bed roll upon which a web of paper is embossed, a steel embossing roll working against the bed roll and a rotary head spaced from the bed roll and provided with detachable knives cooperating with the bed roll to transversely perforate the embossed web.

2,127,770. PRINTING PASTE THICKENER. Erhart Frans, Leipzig, and Max Hardtmann, Naunhof, near Leipzig, Germany. No Drawing. Application July 28, 1934, Serial No. 737,466. 8 Claims. (Cl. 8—6.)

1. A printing paste having as, a nonadhesive non-alkaline thickener a polar hydrophile alcohol containing at least 8 carbon atoms insoluble in water and a solution of an emulsifying water soluble hydrophile salt of an aliphatic sulfo acid containing at least 8 carbon atoms in the aliphatic nucleus in water.

2,127,955. METHOD OF PRINTING. Philip A. Frazier, Oak Park, Ill. No Drawing. Application July 17, 1936, Serial No. 91,095. 9 Claims. (Cl. 101—426.)

1. In relief or letterpress printing the method of supplying moisture to material to be printed, comprising spraying the printing ink of an oil or grease base with water in finely divided form just prior to the time the printing ink is applied to a printing face.

2,128,105. RELIEF PRINT. John J. Tighe, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a corporation of Massachusetts. Application July 30, 1934, Serial No. 737,483. 8 Claims. (Cl. 41—24.)

3. The combination with a sheet of paper, and a resinous thermographic ink imprint thereon, of a rosin binder on the ink imprint, and crystalline grain of sufficient grit size that individual particles are visible to the naked eye, in the binder, the binder covering the grain so that it is not exposed.

2,128,129. STEREOTYPE METAL FURNACE. Marcus M. Farley, Battle Creek, Mich., assignor to Duplex Printing Press Company, Battle Creek, Mich., a corporation of Michigan. Application September 25, 1935, Serial No. 42,124. 1 Claim. (Cl. 22—2.)

Apparatus comprising a metal melting furnace having an outlet for waste gases of combustion; a metal pot on the furnace, a hood over the pot, a metal pump in the pot, a spout connected with the pump and extending from the pump to a point outside the hood. a jacket connected with the hood and surrounding the exposed portion of the spout, a pipe for directing hot waste gases from the outlet of the furnace into the jacket, and a discharge for the hot gases at the outer end of the jacket.

2,125,683. PRINTING INK. Cyril Frederick Percy Millar, Chorlton on Medlock, Manchester, England. No Drawing. Application December 30, 1935. Serial No. 56,830. In Great Britain November 27, 1935. 4 Claims. (Cl. 134—17.)

1. A process for manufacturing products for working up into printing inks which comprises the steps of subjecting a charge of vulcanized rubber containing fabric and at least one oil selected from the group consisting of vegetable and mineral oils to the action of agitation and distillation by heat, stopping the distillation while the residue is still in a freely flowing condition and blowing superheated steam at a temperature above 450 deg. F. through the residue in a separate vessel to remove objectionable pungent matters.

Platemaking:

2,128,672. PRINTING INK. Albert E. Gessler, Yonkers, N. Y., assignor, by mesne assignments, to Interchemical Corporation, Cincinnati, Ohio, a corporation of Ohio. No Drawing. Application March 17, 1934, Serial No. 716,178. 1 Claim. (Cl. 134—35.)

A printing ink adapted for printing presses having rollers of the glue, glycerine and water type, which is substantially non-drying on the press at ordinary temperatures and dries rapidly at 150 deg. C., consisting of coloring matter dispersed in an organic viscous vehicle consisting of a liquid component and a solid component—being a member of the group consisting of natural and synthetic resins and cellulose compounds—dissolved in the liquid component in sufficient quantity ot give the ink the consistency of an ordinary printing ink, in which the major part of the liquid component is diethylene glycol monobutyl ether acetate.

2,128,877. REPEAT DESIGN PRINTING. Trevor R Gautier, Nashua, N. H., assignor to Nashua Gummed and Coated Paper Company, Nashua, N. H., a corporation of Massachusetts. Application June 10, 1936, Serial No. 84,467. 3 Claims. (Cl. 101—426.)

1. The improved method of applying repeat-unit designs in printing on sheet material of indefinite length which comprises forming the leading and terminal edges of a printing element of single-design-unit length along plural-directional lines cooperable in successive imprints to provide a pleasing design, printing with the element successive imprints wherein portions of the edge formations so overlap as to produce a calculated pleasing design at the unit juncture zone, and subsequently severing the sheet material transversely thereof within the juncture zones corresponding to the lengths of material desired.

2,130,229. PRINTING MECHANISM. James A. Close, Du Bois, and Sidney R. Collins, Clearfield, Pa. Application May 15, 1936, Serial No. 79,904. 14 Claims. (Cl. 197—12.)

6. A printing apparatus comprising a shaft, a printing-wheel carried by the shaft, a plurality of printing insignia carried by the wheel, means controlling the position of the wheel on the shaft, rotor magnets carried by the shaft, stator magnets mounted in a ring around the motor magnets, and a keyboard connected to the magnets and adapted to control the supply of electric current to any selected set of magnets upon operation of any key to move a selected insigne to printing station.

Plate Making:

2,124,679. CORRECTION OF NEGATIVES. William J. Wilkinson, Eastchester, N. Y., assignor of one-half to Miehle Printing Press and Manufacturing Company, Chicago, Ill., a corporation of Illinois. Application May 11, 1936, Serial No. 79,173. 12 Claims. (Cl. 95—5.1.)

1. A corrected negative of a subject consisting of a transparent-support, a negative-stratum of the subject on the support, a corrective-transparency stratum only of the subject and a negative-mask stratum only of the subject superposed in either order on and in register with the negative-stratum and with one another, all three strata being in adhered relation to one another, the mask being substantially-opaque for all white portions of the subject and otherwise transparent.

2,124,680. SURPRINTING. William J. Wilkinson, Eastchester, N. Y., assignor of one-half to Miehle Printing Press and Manufacturing Company, a corporation of Illinois. Application January 12, 1937, Serial No. 120,249. 24 Claims. (Cl. 95—5.)

1. In the method of surprinting supplemental matter for the production of a printing-plate, the steps of making a stripping-transparency of the original supplemental matter, making a transparency of the original copy, stripping the supplemental-matter-transparency and securing it in proper position on the copy-transparency, thereby providing a supplemental-matter-master, opaquing the master, if not otherwise opaque, except for the supplemental matter, and supplying a photographic opposite of the master on a transparency of the original copy, the opposite being photographically-opaque in those portions which have been acted upon by the light through the master.

2,124,802. DEVICE FOR OBSERVING COLOR REGISTER INDICATIONS OF COLOR PRINTS DISCHARGED FROM A MULTICOLOR PRESS. Richard Edgar Wallace, Toronto, Ontario, Canada. Application January 13, 1936, Serial No. 58,832. 2 Claims. (Cl. 88—14.)

1. A device for observing color register marks upon a printed sheet moving in a linear direction, comprising a rotatably mounted reflector adapted to reflect the image of the register marks in a constant line of direction during a given length of movement of the marks, lenses interposed in the line of the reflected image, a reflector interposed in the line of the reflected image having an opening therethrough, means directing a beam of light onto the perforated reflector to be reflected onto the movable reflector and from thence to the printed sheet to illuminate the register mark throughout its path of movement, means for operating the rotatable reflector to follow the movement of the register mark on the printed sheet and direct an image of the mark in a constant line of direction through the lenses and through the opening in the perforated reflector.

2,125,331. PRINTING PLATE MOUNTING. William F. Brugmann, Evanston, Ill. Application December 26, 1933, Serial No. 703,977. 26 Claims. (Cl. 101—388.)

1. A printing plate clamp comprising a body insertable into a groove in a mounting base, a pair of transversely movable locking members mounted thereupon and capable of being spread apart to lock the clamp in the groove, means normally retracting the members, means for separating the members against the stress of the retracting means, and means mounting the locking members for movement about the separating means as a fulcrum.

2,126,017. METHOD OF PRODUCING PHOTOGRAPHIC REPRESENTATIONS ON ALUMINUM SURFACES. Alexander Jenny, Berlin-Charlottenburg, and Nikolai Budiloff, Berlin-Friedenau, Germany, assignors to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a corporation of Germany. Application April 25, 1934, Serial No. 722,398. In Germany April 25, 1933. 5 Claims. (Cl. 95—8.)

1. In the process of producing photographic representations on articles of aluminum and aluminum alloys, the steps which comprise treating a sheet of aluminum composition electrolytically in an aqueous coating bath containing chromic acid, under conditions producing a porous oxide layer thereon, then treating the resulting oxide-coated sheet electrolytically in an aqueous bath of oxalic acid, under conditions producing the accession of additional porous oxide coating, and impregnating the resulting coating with photo-sensitive materials.

2,126,181. LITHOGRAPHIC PRINTING PLATE. Walter Strickland Field, London, England, assignor to The Pyrene Company Limited, Brentford, England, a British company. No Drawing. Application December 11, 1936, Serial No. 115,445. In Great Britain December 21, 1935. 6 Claims. (Cl. 148—6.)

1. The process of chemically graining a zinc lithographic plate which comprises cleaning the surface of the plate with a suitable cleansing agent, rinsing the surface of the plate with water or the like, treating the surface of the plate with a heated solution of a hydrolyzable acid phosphate of a divalent metal from the class of phosphates adapted for the protective coating of zinc for about thirty minutes, and rinsing the plate.

Printing Presses:

2,123,997. SHEET-HOLDING MEANS FOR CYLINDERS OF PRINTING PRESSES AND THE LIKE. Joseph F. Jirousek, Cleveland, Ohio, assignor to The Chandler & Price Company, Cleveland, Ohio, a corporation of Ohio. Application May 1, 1935, Serial No. 19,208. 7 Claims. (Cl. 101—415.1.)

1. In a mechanism, a cylinder and means for holding sheet material about its periphery, including a plurality of jaw-couples for holding one end of the sheet to the cylinder, the couples having each an interposed spring and a gauge pin, a bar in common mounting the jaw-couples, a central pivot for the bar, a regulating screw at each end of the bar, and self-tightening clamp means for the other end of the sheet, the means having roller-jaw element and a jaw element for receiving the same, and an inclined surface upon which the roller element may travel.

2,124,376. PRINTING APPARATUS. Josef Rona, Budapest, Hungary. Application April 9, 1936, Serial No. 73,559. In Belgium April 8, 1935. 6 Claims. (Cl. 101—35.)

1. In a printing apparatus for printing box shaped articles, spaced parallel conveyor belts movable synchronously in the same direction for carrying between them the box shaped articles to be stamped, means for feeding box-shaped articles to the belts, means for driving the belts, means for guiding opposite substantially parallel portions of the belts first vertically upwardly and then in a curved path to a substantially horizontal plane, printing rollers arranged opposite the edges of the belts for printing upon opposite sides of the boxes as the belts move the boxes upwardly, and means for guiding the box-shaped articles leaving the conveyor, belts in a direction toward the horizontal plane occupied by the feeding means.

2,124,420. PRINTING PRESS. Christen R. Kaddeland, Shelton, Conn., assignor to Harris-Seybold-Potter Company, Cleveland, Ohio, a corporation of Delaware. Original application May 20, 1933, Serial No. 671,807. Divided and this application January 24, 1935, Serial No. 3,238. 35 Claims. (Cl. 101—247.)

34. In a printing press comprising a printing cylinder and a co-acting pressure roller, separate adjustable pressure applying means including a preloaded yielding pressure member for applying pressure on each end of the roller, means for adjusting the pressure applying means for one end of the roller independently of the other pressure applying means while the press is in operation, the adjusting means being operable from substantially a single location, and means for separately indicating the pressure applied by the pressure applying means to each end of the roller.

2,125,206. DAMPENING DEVICES FOR PRINTING MACHINES. Anton Stobb, Long Island City, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a corporation of New York. Application August 26, 1935, Serial No. 37,987. 16 Claims. (Cl. 101—148.)

1. In a dampening device for printing machines, a fountain for dampening fluid, a dampening roller mounted for rotation, a movable conduit having outlet apertures and extending from and communicating with the fountain to convey fluid from the fountain towards the roller, driven means for imparting such movement to the movable conduit as to discharge the fluid from the conduit through the outlet apertures to the roller.

2,126,768. DAMPENING SYSTEM FOR LITHOGRAPHIC AND ANALOGOUS PRESSES. John G. Goedike, San Antonio, Tex. Application January 31, 1938, Serial No. 185,812. 8 Claims. (Cl. 101—147.) (Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757.)

1. The method of dampening printing surfaces of lithographic and analogous printing members, which consists in feeding a dampening fluid from a source of supply in two directions through an endless path to a dampening system, and transmitting the dampening fluid to the printing surface through the dampening system.

2,129,698. INTAGLIO PRINTING PRESS. Hans J. Luehrs, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a corporation of Delaware. Application May 27, 1937, Serial No. 145,111. 12 Claims. (Cl. 101—1.)

1. In an intaglio printing press, side frames, a track rail, means for moving it endwise into and out of the press through a side frame, a design cylinder, and means whereby it may be moved along the track rail endwise through the side frame.

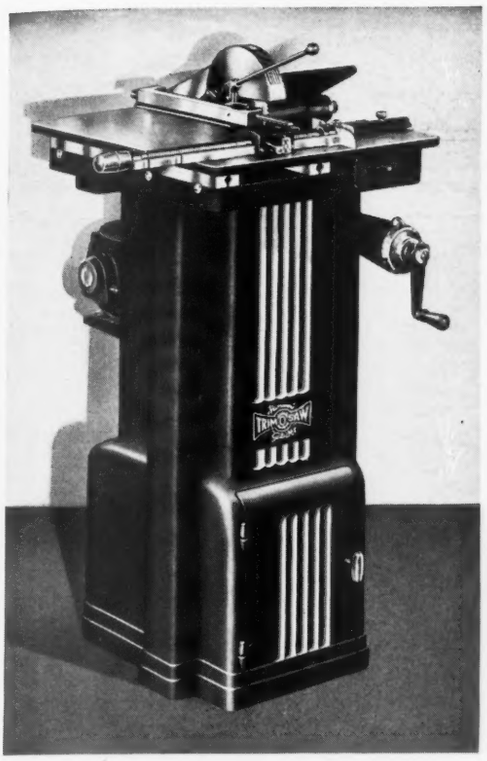
2,129,699. INTAGLIO PRINTING PRESS. James J. Luehrs, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a corporation of Delaware. Application May 27, 1937, Serial No. 145,112. 18 Claims. (Cl. 101—1.)

1. In an intaglio printing press, side frames, a track rail comprising separate alined cooperating sections, a design cylinder and means whereby it may be moved along the rail sections endwise through a side frame.

Patent Papers

Printed copies of patents are furnished by the United States Patent Office at 10 cents each. Address the Commissioner of Patents, Washington, D. C. and enclose 10 cents for each patent paper wanted.

In 3 Years 600



Model G-3—One of the 3 Hammond Gliders

The famous Glider Celebrates its 3rd Anniversary with 600 installations. Many installations are in batteries of two to ten.

This is concrete evidence of America's choice and of the Glider's smooth, precision performance.

You too should be enjoying the Glider's revolutionary sawing features . . . its remarkable ease, speed and accuracy. Plan to have a Glider soon . . . it will pay you well—ask any of the 600. Write today for users, prices and full information.

Hammond Machinery Builders Incorporated

KALAMAZOO, MICHIGAN, U.S.A.

1604 Douglas Avenue

NOTE:—Equally as many of the other dozen TrimOsaw models have been installed during the same period. Ask about them and the popular Hammond Routers and EasyKasters.

Your Newspaper

is a mirror, faithfully reflecting the quality which goes into its make-up.

Be proud of the story written between the lines!

To achieve the best possible results try

APS SUPERIOR GUMMED PACKING FELT

- Sheets 18"x28"
- Cut Strips
- Quantity discounts

APS CORK MOLDING BLANKETS

- Superior "AEE" . . extra hard
- Superior "A" . . hard
- Metropolitan "B" . . medium

- *For complete information, best prices and quantity discounts write to*

American Publishers Supply

Box 131 **W. Lynn, Mass.**

Cushman Offset Motors

for Maximum Capacity and Low Operating Cost

Whether you select the Ball Bearing type—shown above—or the Standard "self-oiling" model, you will find that Cushman Offset Motors will operate your typesetting machines at their maximum capacities and at lower operating costs. There are more than 12,000 Standard models, alone, in use today throughout the world. Investigate.

CUSHMAN ELECTRIC CO.

65 S. Main St. **Concord, N. H.**

West Coast Agent:
Shaw Machine & Tool Co.
Temple St., Los Angeles, Calif.

Central Agent:
M. L. Abrams Printing Mach. Co.
1639 Superior Ave., Cleveland, O.

"PLATE-TAK"
CUT MOUNTING TAPE

No tacks. No cement to squeeze out. Simply lay a strip of this super-thin tape under the cut; press down by hand, and the cut is there to stay. When through, the tape strips off, leaving clean surfaces on both cut and base.

Free samples on request.

"FLECTO"
GUMMED BACKING FELT

Practical knowledge and research have combined, to produce this backing felt which is successfully used on all dry mats. Made in gauges .025, .030 and .035—sheets 18 in. by 24 in. and gauges .040, .045 and .050—sheets 18 in. by 22 in. Cut into strips without charge.

Free samples on request.

Do not be misled by similar-sounding names seeking to trade on the wide-spread acceptance of "Plate-tak" and "Flecto."

EASTERN NEWSPAPER SUPPLY
9603 NORTHERN BLVD. CORONA, N. Y.

Thickness

(*Continued from Page 15*)

rubber plates, including copper, brass and aluminum. It is even possible to utilize heat-treated electrotypers' metal as backing, but a harder metal is more durable for this purpose, especially for rubber plate duplicates of original color plates.

Tint Plates

In much the same manner, solid rubber tint plates can be constructed, for the printing of delicate tints, bright color, metallic ink, or transparent overprint varnish. These plates, however, should be made of vulcanized sheet rubber, a regular product which is supplied by several of the larger rubber manufacturing companies, and the roll stock can easily be cut to any required surface size. The solid tint plates, affixed to a sheet-metal backing, and attached to a plate-mounting system, can be worked either on a flat-bed cylinder press or a rotary press. In many instances, the same plates may be reused for other similar work. With the aid of a ruler and a sharp knife, it is a simple operation to trim the used plates to smaller sizes, cutting the unwanted rubber away right down to the metal backing.

Applications of Solid Rubber Plates

There are many different applications for these solid rubber plates. They are being used to color white paper stock on one side; to print several solid colors or tints on a web of paper for fan-fold business record forms; to produce metallic coated paper, either by means of direct printing in metallic ink, or by the method of first printing the stock with sizing and then having the wet sized sheets run through a bronzing machine. They are also being used to finish various kinds of color printing with a coating of transparent overprint varnish, and single-color halftone printing with a film of *colored* transparent overprint varnish.

Mount Plates on All-Metal Plate-Mounting Base

The largest users of molded rubber printing plates are specialty printers and the paper converting industry as a whole. However, many commercial printers are now using molded rubber plates on flat-bed cylinder and on platen presses for the color printing of advertising folders, covers for booklets, street car and store counter cards, posters, hangers, greeting cards, paper box wrappers, large manila mailing envelopes, wall calendar backs, metal-faced paper labels, etc. The

This illustration shows a 0.152 in. thick metal-backed molded rubber printing plate mounted on Printing Machinery Company's Metal Base.

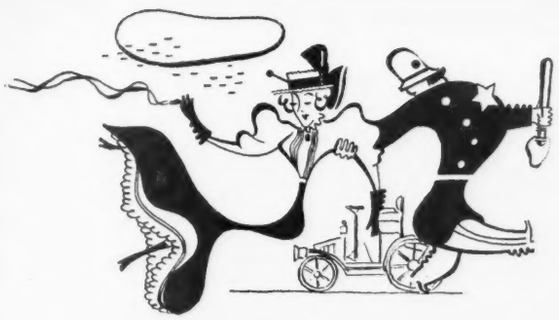
plates for all this range of work should be to the standard 0.152 in. height, and they should be worked on a patent all-metal plate-mounting base.

CLIP THIS AD
FOR FREE TRIAL SHEETS STATE PRESS AND SIZE WANTED

RIEGEL'S CERTIFINE TYMPAN

A low-priced tympan with a hard even surface and exceptional strength. Ideal for short-run job work. Nationally stocked in roll widths for every press.

RIEGEL PAPER CORPORATION 342 MADISON AVENUE NEW YORK, N. Y.



DISORDERLY CONDUCT 1905

We turn with a smile that hides a longing to the 1900's, when the first lady was arrested for smoking the first cigarette in the first auto (almost). New ways followed thick and fast in those days. One new way that has meant much to printers ever since was the Kimble Idea of a *specialized motor* for printing equipment. From that day to this Kimble has specialized on motors for Graphic Arts Equipment. Ask any leading printer what the Kimble Idea has meant to him in his search for profits and prestige. KIMBLE ELECTRIC COMPANY, 2011 W. Hastings Street, Chicago, Ill.

KIMBLE MOTORS

Distributed by AMERICAN TYPE FOUNDERS

Branches and Sales Agents in Twenty-Five Cities

Satisfaction Brings Repeat

Detroit Daily News is now 100% C&G Equipped

No. 3-A C&G Saw Trimmer

First C&G Purchase:
1 Model 2.....Feb. 1937

Additional Purchases:
1 Model 2.....Mar. 1938
5 Model 3-A...Mar. 1938
1 Model 3-A..Sept. 1938

All of these machines now in use, including two C&G Angle Gauges, C&G Universal Saw Blades throughout, and C&G Grinding Device for sharpening these blades.

Many other large and small newspapers ordering additional C&G saws with these outstanding features: Easy movement of work through saw without danger and necessity of pushing heavy table, C&G Universal saw blades, positive safe-locking of work on near side of gauge, new Angle Gauge for sawing intricate angles, and many other features we will be glad to tell you about.

Descriptive literature upon request.

Milwaukee Saw Trimmer Corp.

610-612 East Clybourn St., Milwaukee, Wis.

Variety of Hardness

To provide for the making of all kinds of molded rubber printing plates, a number of large manufacturing companies are now producing both oil-resisting and acid-resisting types of sheet rubber, made in several standard thicknesses. They are also making the sheet rubber in different degrees of durometer hardness, ranging from 45 to 85 deg. For example, an unvulcanized sheet rubber of 85 durometer hardness, has been proved most efficient for making rubber plate duplicates of fine-line engravings, halftones from 65 to 100-line screen, and forms of small sizes of type. The softer grades of unvulcanized sheet rubber, durometer hardness, 75, 65, and 45 deg., cover a wide variety of applications, and make it possible to produce medium-soft or real soft vulcanized molded rubber plates to meet the most exacting printing requirements of many different makes, weights and finishes of paper stock. The *unvulcanized* rubber compounds are always used to make vulcanized rubber plates.

Sheet Stocks for Printing with Molded Plates

Included among the variety of sheet stocks now being printed with molded rubber plates are: White wove, kraft, regular glassine, the new ultre-transparent glassine, metallic-coated paper, clay-coated folding boxboard, cellophane and all other makes of transparent materials, flint-glazed and friction-glazed papers, metal-faced paper, celluloid, waxed paper, vegetable parchment and special moisture-proof parchment, manila, heavy coated paper-board, bristols, solid fibre board, corrugated board, tissues, uncoated book papers, antique finish rag-content stocks, lacquer-coated paper, and special velvety papers like those finished with a flock surface.

The Use of Fillers

It is evident that most of the stocks mentioned require what is called a "kiss" impression in printing from rubber plates. Such a fine degree of impression is impossible from a form made up of molded rubber plates which are of varied heights, or when the plates are directly mounted with adhesive on wood base or even on a grooved metal plate-mounting system. The method of inserting 12-point metal liners, or fillers in he angle grooves of a patent metal plate-mounting base is recommended or use with rubber plates which are not backed up with a sheet of hard tmetal. No metal fillers are necessary in a grooved base, however, when fthe rubber plates have a firm metal backing.

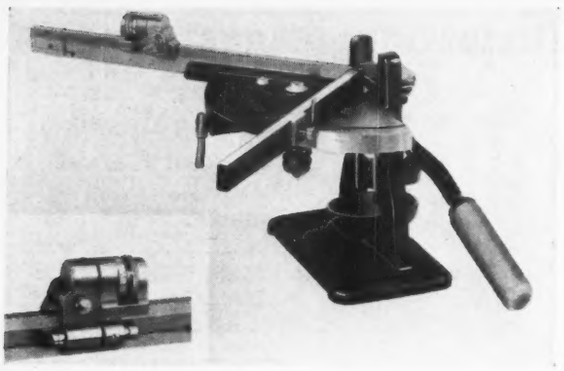
Both Styles of Patent Mounting Base Suitable

Both Diagonal Block and Register Hook and Sterling Toggle Hook and Base Systems are adaptable to the accurate mounting of all kinds of metal printing plates and rubber printing plates, made to the standard height of 0.152 in. Both bases are made to the standard height of 0.759 in. It is important to know that when plates of the 0.152 in. height (or 11 points) are placed on one of these Bases, the mounted plates stand approximately 0.007 in. below type high. It is an easy matter for the pressman, however, to place paper *interlays* between the plates and the base, to raise the plates to type high or any desired *lower* height. In the case of molded rubber plates, finished with a hard metal sheet backing to the 0.152 in. unmounted height, most pressmen prefer mounting these plates slightly below type high, or to a total height of 0.916 in., for example.

Utility of Molded Plates

Undoubtedly, first-class makes of molded rubber printing plates have come to stay in the letterpress printing industry. Their uses in the commercial branches of the industry, on flat-bed presses of all makes and sizes, are constantly increasing, because they require little make-ready. Good printing from them can be done with a considerable saving in ink consumption, as compared with the same kind of printing from metal plates. One of the new developments consists of "non-stretch" molded rubber plates, made for close-register multi-color printing, in two to eight colors. The "non-stretch" plates are made on a hydraulic vulcanizing press by placing a sheet of special fabric insert material between two thin sheets of unvulcanized rubber and fusing them together with the insert while the plate remains on the heated mold.

However, even a regular molded rubber plate becomes close to the equivalent of a laminated "non-stretch" plate when it is firmly attached with rubber adhesive to the surface of a sheet of hard zinc, copper, aluminum, or other suitable metal. The thickness of the sheet may be .062 in., and the thickness of the molded rubber plate about 0.090 in. These two thicknesses together form a plate the total height of 0.152 in., the same as the standard height of unmounted electrotypes. Makers of molded rubber plates in general could supply printers with plates of this standard height, for use on flat-bed printing presses, in conjunction with a patent all-metal plate-mounting system.



Craftsmen Machinery Company's improved hand mitering machine with precision self-locking point gauge.

Improved Mitering Machine

Craftsmen Machinery Company announces an improved hand-mitering machine upon which rule can be mitered with sharp, clean corners which will fit perfectly. A precision finger-touch self-locking point gauge is provided. The blade is made from fine Swedish steel.

P-Double-E File No. 1S.

Fresh Fruit Odor Ink

Givaudan-Delawanna, Inc., announces a new fresh fruit aromatic for use in scenting printing inks. The new product is designated as Ink-O-Dor No. 4. Manufacturer states the new aromatic is appropriate for inclusion in inks used for printing food wrappers, paper napkins, doilies or paper table covers. Manufacturer suggests to printing ink makers the introduction of the new aromatic into printing inks in the amount of 0.5% to 1% by weight.

High-Speed Sheet-Fed Gravure Press Installed

What is claimed to be the largest sheet-fed gravure press installation in the United States has been completed in the plant of the Di-Noc Manufacturing Company, Cleveland. Announcement of the installation which has been in progress over a six-week period, is made by Richard Nagel of Nagel-Ryan Company, American agents for Olympia presses.

The press installed in the Di-Noc plant is 22½ ft. long, 9 ft. high and 7 ft. wide. Sheet size is 40 in. by 54 in. The press operates at speeds up to 5000 sheets per hour.

Some of the details respecting the press are as follows: The relationship of the form and impression cylinders is 1 to 1; sheets are gripped automatically after each impression. Through a slowing-down movement giving a ratio of 15 to 1, the machine will deliver up to 5000 completely dried sheets per hour; cold air drying arrangement dries the ink; force feed splash inking system is used. The press is equipped with a newly improved magnetic streamline feeder which can be arranged to feed two sheets at the same time, making it possible to run two individual jobs.

Further information about Olympia photogravure sheet-fed presses may be obtained from Nagel-Ryan Company direct, or in care of *Printing* Equipment *Engineer.*

P-Double-E File No. 2B13.

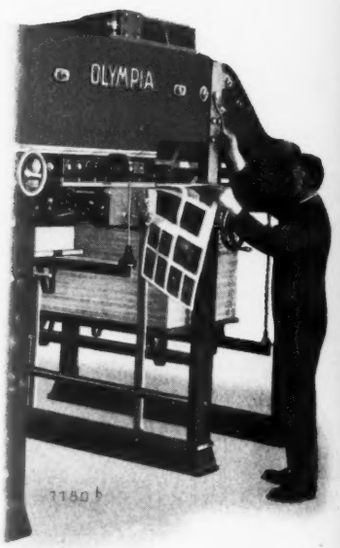


Illustration demonstrates how proof printed sheet may be taken from the Olympia gravure press without disturbing delivery pile.

Champion Blacks

WIN ON MODERN HIGH SPEED PRESSES

- CHAMPION HALFTONE—A non-scratch dense black which will not offset. Can be backed up in two hours.
- CHAMPION SUPER—Fully toned, free flowing, this black will work clean and sharp on super papers.
- CHAMPION BOOK—A high grade ink with good density, it will not shadow through on standard grades.

Sinclair & Valentine Co.

HOME OFFICE

603-611 West 129th Street, New York, N. Y.

BRANCH OFFICES

Albany	Dallas	Philadelphia	Nashville
Boston	Dayton	Jacksonville	Kansas City
Baltimore	Cleveland	Miami	San Francisco
Chicago	Los Angeles	New Orleans	Seattle

Depreciation of Presses

Ten per cent a year is perhaps the most common allowance for depreciation of commercial printing presses. Perhaps this allowance is necessary to be on the safe side in case of accidents. The extent and speed of depreciation largely depends on the care the press receives in oiling and operation at reasonable speed as it ages and the promptness with which necessary repairs and replacements are made.

Some large concerns retire a press after twenty years' service, figuring that replacement is more economical than repairs at this age. A press operated three shifts is retired in seven years and a two-shift press in ten years. The necessary repairs are made when needed in the driving gear, the bearers, cylinder journal and boxes, etc.

All standards for depreciation allowance have been shot to pieces by obsolescence brought about by the introduction of faster, self-feed presses in recent years. Whenever a faster press appears, the printer in the competitive field is forced to buy in order to compete and the introduction of a number of such presses at short intervals makes a reasonable allowance for depreciation hard to estimate, the only certainty being that every further improved press brought out hastens the obsolescence of older presses.

EDES
IS
READY
When a big news story break sends demand for zinc soaring, depend on Edes to supply your needs. Strategically located warehouses, with adequate stocks on hand at all times, are prepared to take care of abnormal demands. And there is little fear of over-taxing the Edes plant, because it has the capacity to supply all the photo-engraving zinc in the U. S. So you can depend on Edes Superfine Quality Zinc to be consistently uniform, because the processing and finishing are never hurried.
EDES
SUPERFINE QUALITY
ZINC
USE EDES HARD MATRIX ZINC FOR MATRIX WORK.
THE EDES MANUFACTURING CO., PLYMOUTH, MASS., U. S. A.
HEADQUARTERS FOR SUPERIOR BRAND COPPER AND PLYMOUTH BRAND BRASS
SALES REPRESENTATIVES
Chemco Photoproducts Co.....25-27 S. Market St., Chicago
Chemco Photoproducts Co.....Queen and Crescent Building, New Orleans, La.
Allan B. Croke Co.....163 Oliver Street, Boston
G. C. Dom Supply Co.....125 East Pearl Street, Cincinnati
Mid-West Photo-Engravers Supply Co..514 North Third St., St. Louis
E. H. Walker Supply Company..1315 14th St., N.W., Washington, D. C.
Selby Mohr.....883 Mission Street, San Francisco
Metzger Photo Supply Co.....1091 South Main Street, Akron
C. S. Illingworth.....49 Springville Ave., Buffalo, N. Y.
Thompson-Hayward Chemical Co.....909 2nd St. So., Minneapolis
Thompson-Hayward Chemical Co.....2228 Blake Street, Denver
GRAF ZEPPELIN IN FLAMES — ACME NEWSPICTURES

Presses

(*Continued from Page 13*)

those where the press has been mounted on steel springs built up in sections and of a cantilever construction. In these cases the prevention of the transmission of up to 96% of the vibration of the press into the building has been attained, the remaining 4% which does actually find itself into the building structure being of no consequence.

An additional advantage to mounting high-speed presses on springs, and one which was not figured on when this was first done, lies in the fact that equipment so installed runs much better than does that carried on the solid foundations. The press runs much more quietly, the web runs more smoothly and in fact the entire machine appears to do its work without the effort required in the older type of installation. This is due, no doubt, to the fact that the machine is cushioned, with the result that all vibrations and shocks are absorbed in the spring mounting, and smoothed out in the same manner that the rough spots in the road are taken up by the springs of the automobile and not transmitted to the car itself. This will probably result in longer life of the press equipment, and we are of the opinion that future presses which will operate at still higher speeds will of necessity be carried on vibration absorbing foundations.

The prevention of the transmission of the air borne noises set up in the pressroom, while not strictly a press problem, has been met and solved by the acoustical engineer with the result that in some installations the roar and hum of the presses cannot be heard in any part of the building other than the pressroom.

High-Speed Pasters

High-speed pasters, whereby the fresh roll of paper is automatically pasted onto the expiring web at the full running speed of the press, are now in successful operation in a large number of plants.

Auxiliary Improvements

Improvements have also been made to the equipment which, although a vital part of the pressroom, are auxiliary to the press itself. Heavier and faster paper conveyors to meet the demands put upon them by the higher speeds have been designed, built, and are in successful operation. Press drives of the group type, both a.c. and d.c., have been greatly improved, and two types of unit drive where an individual motor is installed for each unit and folder are now in operation in several plants and are giving excellent results.

What the future promises is hard to tell. We are, however, of the opinion that, with some further changes in press equipment, and improvements not only in the paper and ink but also in plates and plate making, still higher speeds and a yet better printed paper can be attained, should there prove to be a demand for this still further advanced type of equipment.

Addresses Montreal Craftsmen

Paul A. Bennett, in charge of typographic layout with the Mergenthaler Linotype Company, will address the Montreal Club of Printing House Craftsmen, at Montreal, the night of October 17. Mr. Bennett will discuss and illustrate many pages from the popular "Peter Piper" book issued by the Mergenthaler Linotype Company.

Completes Memphis Family

A new member to complete the Linotype Memphis family—12-point Memphis Medium Condensed with Memphis Extra Bold Condensed—is announced by C. H. Griffith, vice-president in charge of typographic development with the Mergenthaler Linotype Company.

"With the introduction of this new member," says Mr. Griffith, "Memphis Medium Condensed with Memphis Extra Bold Condensed

MODERN MAN CANNOT BE SE
rved by a tool that is just good
enough or a little better than

MODERN MAN CANNOT BE SE
rved by a tool that is just good
enough or a little better than

is available for keyboard Linotypes in all sizes from 10 to 36 point, inclusive, and so are the same sizes of Memphis Medium Condensed with Memphis Bold Condensed.

"On the All-Purpose Linotype Memphis Extra Bold Condensed and Memphis Medium Condensed may be had in 96, 120 and 144 point.

ATF's Special Representative

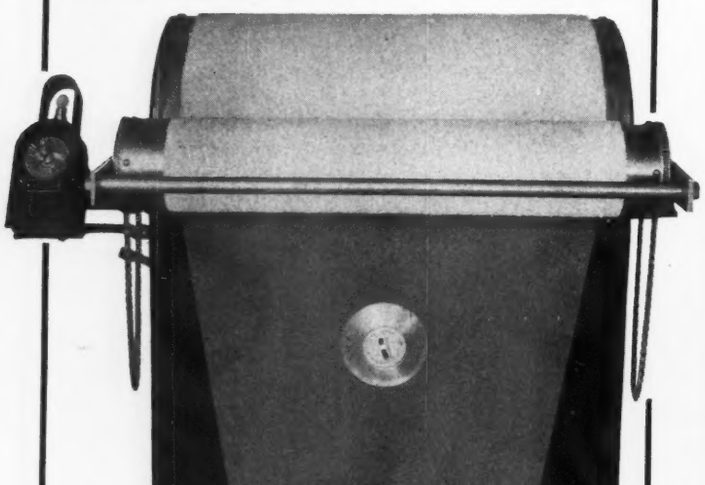
American Type Founders, Elizabeth, N. J., announces the appointment of Ned Rudolph as Special Machinery Representative. Mr. Rudolph is well known to printers throughout the Mid-West and has been associated with the printing trade and newspaper work in that territory for 16 years.

FORM-O-SCORCH

- DIRECT HEAT
- THERMOSTAT
- TEMPERATURE CONTROL
- AJUSTABLE CONTROL TENSION
- PILOT LIGHT & TIMER

$250 *WITHOUT TIMER*

$275 *AS ILLUSTRATED*



MODEL "MMM"

AMERICAN PUBLISHERS SUPPLY
Box 131, West Lynn, Mass.

REFINALLOY

- The easy, certain method for keeping type metal in working condition.

Buy your metal from any reliable manufacturer and keep it in good shape with the Refinalloy System for Typemetal Control.

SCIENTIFICALLY CORRECT

- Sharper Type faces
  Better Slugs
  Cleaner Pot Throats
  Greater Production

Write for Literature and Trial Package

KANSAS CITY SMELTING CO.
Guinotte and Park Avenues
Kansas City, Mo.
Manufacturers of
HORSESHOE BRAND TYPE METALS

Technical Literature

Scientific Plan for Metal Handling

Booklet containing pertinent illustrations describes and analyzes the Monomelt plan for metal handling in Tulsa (Okla.) *Tribune* composing room. *P-Double-E File No. 1J.*

Building a Modern Composing Room

Folder illustrates and describes various kinds of Hamilton cabinet equipment and page storage cabinet for composing room. *P-Double-E File No. 1E.*

Toujours Gai! (Always Gay!)

Folder discusses Bauer's Legend, tells how to use it and shows sizes from 24 to 72 pt. *P-Double-E File No. 1EE5.*

Man Who Made Charlie McCarthy

Folder printed with illustrations in color and halftone discusses specialization in the manufacture of Kimble electrical equipment for the Graphic Arts.

Master Models 31 and 32

Liberally illustrated booklet, 9 in., describes Blue Streak Linotypes—Master Models 31 and 32, mechanical features such as six-mold disk, how they may be equipped, and also presents several pages of various kinds of composition which may be executed on the machines. *P-Double-E File No. 1G.*

Duplex Display

Booklet explains how Linotype Duplex Display matrices are used and presents one-line specimens of display faces which have been cut to date. Linotype matrix alignments are explained. *P-Double-E File No. 1G5.*

Newspaper Character

This booklet, 9¼ in. by 11¾ in., presents reduced showings of many different kinds of front pages from *The Linotype News*, covering a range of fifteen years. Examples shown are conservative, aggressive, quiet, strong, conventional and "decidedly different" pages. Foreword in booklet states some of the pages, admittedly, now suggest how not to make up. Detailed showings of type faces adaptable to newspaper headings are shown.

New Small Caps on Monotype

Is title of new booklet showing one line specimens which have been prepared for Bookman, Caslon Bold, Cheltenham Medium and Bold and Garamond Bold. *P-Double-E File No. 1G5.*

Ludlow Typefaces

Presented by Ludlow Typograph Company. In the 16-page booklet are shown over 120 one-line typeface specimens. Most all specimens shown in 36-point size. *P-Double-E File No. 1G5.*

Presenting Professional Kodachrome

Brochure presented by Eastman Kodak Company announces Kodachrome Professional Film in cut sizes for standard cameras ranging from 2¼ in. by 3¼ in. up to and including 8 in. by 10 in. Brochure has tipped-in color insert (8¼ in. by 11 in.) made from a 5 in. by 7 in. original. *P-Double-E File Nos. 2D8 and 2E22.1.*

M-H Vertical Plate-Coating Machine

Illustrated folder describes machine and what it will do. Advantages enumerated on Page 4. *P-Double-E File No. 2D21.*

"2 in 1" Distribution

Leaflet describes mechanical features of Linograph "50" line-slug composing machine. *P-Double-E File No. 1G.*

Refinalloy System

Booklet published by Kansas City Smelting Company describes the Refinalloy System for type metal control in the composing room.

Elrod Lead, Slug, Rule and Base Caster

Illustrated broadside explains in detail the mechanical features of the Elrod lead, slug, rule and base caster to give reader idea how various parts function. *P-Double-E File No. 1G4.*

Any of these new pieces of literature will be furnished upon request to Printing Equipment Engineer, *1276 W. Third St., Cleveland, Ohio.*

S. N. P. A. Conference

(*Continued from Page 22*)

An electrical contact is made by the angle piece to warn the runner when the galley is full. He also mentioned the Vicksburg machines are fitted with special mold-turning segments so that slugs are cast alternately in separate molds to keep down the mold temperature and insure casting of solid slugs.

Etching Mold Caps

H. R. Capps, talking under the subject "Marking slugs for machine identification," stated he etches slightly the number of the machine in mold caps with a mixture of hydrochloric and muriatic acid, after first coating the mold cap casting surface with either beeswax or paraffin. Another executive does the etching with iodine. The idea, it was brought out, enables the composing room superintendent to know instantly on what machine original composition or corrections have been made, simply by referring to the machine number on the slug itself. Another benefit from number-etched mold caps is that in case of slug trouble it is not difficult for the machinist to identify the machine which is causing trouble.

Foreign Ad Plates

Claude Baker, Composing Room Superintendent of the New Orleans *Times-Picayune* and *States*, asked if anyone else had had trouble in receiving foreign ad plates which were too wide for their papers. Clyde V. Lancaster, San Antonio (Tex.) *Light*, replied that in a few instances his paper had received such plates but had overcome the difficulty by making a mat and shrinking to necessary width.

Mr. Lancaster also stated in response to a question that he adds two points for each inch of advertising for shrinkage allowance. In other words, on a 20 in. column 20 points is added.

No Trouble With 4-pt Rule

Under the topic: "Difficulties encountered in the use of 4 pt. column rule," Fred Connell of the Atlanta *Journal*, remarked that it doesn't seem that everybody had had trouble in making the change to 4 pt. column rule, since better than 150 papers had made the change and had not reported any difficulties. Clyde V. Lancaster asserted 4 point column rules and the resultant fractional em column measurements are as easy to handle as 6 point column rules. M. George Martin, Production Manager of the Louisville *Courier-Journal* and *Times*, says there is no confusion or difficulty in his plant as the result of using 4 point column rules.

Ralph Buvinger, Wood Newspaper Machinery Corporation, who has had broad experience extending over a period of years with newspaper production matters, said that about 100 A.N.P.A. papers and approximately 100 non-member papers are now using 4 point column rules. None of the executives on these papers seem to have any trouble. Advertising agencies are cooperating splendidly. There is no difficulty involved in making the change.

Tuesday Morning

The Ogden Test

Chairman Strickland said the first question to be considered at this session would be the one which had been deferred from the previous session and which read as follows: "Ask R. Hoe & Co. to explain the test made in the Hoe plant with Walter Ogden, Scripps-Howard mechanical superintendent, in regard to the 60 deg. and 45 deg. bevels. Why do plates lift?" After Mr. Strickland read the report from an A.N.P.A. Mechanical Bulletin*, he requested Walter C. Cooper of R. Hoe & Co. to discuss the subject.

In the Ogden test made at the Hoe plant, a demonstrating press was equipped with rings and bevels of 60 deg. on one side and 45 deg. on the other on the same cylinder. The impression was regulated so that with the press moving in slow motion the plate barely contacted the paper. At speed of 40,000, due to the lift in the plate, printing began to occur. At speeds up to 60,000, plates having the 60 deg. bevel were not lifting away from the cylinder any more than, if as much as, the plates having the 45 deg. bevel.

In Mr. Cooper's opinion, on press speeds up to 50,000 i.p.h., it makes no difference about clip bevels, operation being satisfactory on either bevel. He stated, however, on speeds beyond 50,000 that the 45 deg. clip is better.

In the test, a cutting tool was mounted opposite the plate cylinder, the tool marking the plate more or less according to the speed at which the cylinder was operating.

Mr. Cooper stated that at present press speeds there is nothing serious about plate lift or bend. There is a squeezing action in the lockup on the cylinder which tends to lift a plate. Centrifugal force is another reason for plate lift. There is no "slap" action of the plate against the cylinder because under practical conditions the following side of the plate is ironed down against the plate cylinder by the impression cylinder.

Roller Costs

Peter Prassinos, Pressroom Superintendent of the New Orleans *Times-Picayune*, gave com-

CONSULT
P-DOUBLE-E
INDEX

**A.N.P.A. Mechanical Bulletin No. 184, June 30, 1938, contained reprint of letter written by Walter Ogden, Pressroom Superintendent, the Cleveland* Press, *and also contains summary of answers received from a questionnaire returned to the A.N.P.A. Mechanical Department by 226 member offices publishing 278 papers. In this Bulletin it is shown that 130 papers are using 45 deg. clips and 95 are using the 60 deg. angle clips.*

FOR DEPENDABLE MAKEREADY PROTECTION

Buy and Specify
CROMWELL
SPECIAL PREPARED
Tympan Paper

THE CROMWELL PAPER CO.
4801-29 S. WHIPPLE ST. CHICAGO, ILL.
47-15 PEARSON PLACE LONG ISLAND CITY, N. Y.

TINGUE
TRADE MARK
PRESS BLANKETS
Keep Your Presses Productive! Save Make Ready Time!
TINGUE on Press Blankets guarantees Superior Printing Qualities
TINGUE PRINTING PRESS BLANKETS
are guaranteed to give superior printing
. . . at low production costs . . .
TINGUE, BROWN & CO.
118-120 East 25th St. NEW YORK, N. Y.
1227 Wabash Ave. CHICAGO, ILL.
723 East Washington Blvd. LOS ANGELES, CAL.

AUCTION We will on Thursday, October 20, 1938, at 10:30 A. M. sell at PUBLIC AUCTION The following property formerly of the . . .
UNITED PUBLISHING CO., INC., 1411 WYANDOTTE STREET, KANSAS CITY, MISSOURI
1 Goss Magazine Press with Goss Folder and Motor, page size 10-9/16" x 14", 21" cut off, 32 page, 56" wide.
1 Kelly Model "B" Automatic Cylinder Press with Extension Delivery.
1 Seybold Model 10-Z, 45" Paper Cutter, 7 Trim.
1 Oswego 42" Paper Cutter. 1 Miller Electric Saw and Cutter.
10 Hamilton Type Cabinets. 1 Typehigh Machine.
1 Chandler and Price "Gordon" 10 x 15 Press.
2 Latham Stitching Machines
5,000 lbs. Type in Various Faces and Sizes.
100 Rolls Composition, Magazine Paper.
Numbering Machines, Steel Furniture, Patent Blocks, Proof Press, Composing Room Equipment, Imposing Stones, Galleys, Galley Cabinets, Paper Lift, Baler, Chases, Electro Cabinets, Lead and Rule Cutters, Trucks, Scales, Electrical Equipment and many other items.
For Further Information Write or Call SAMUEL L. WINTERNITZ & CO. 38 S. Dearborn St., Chicago, Illinois

parative costs between composition and rubber rollers. He also stated the problem of regrinding rubber rollers so far as small daily papers is concerned is negligible.

Rings and Clips

The next topic taken up consisted of the query: "Is it safe to cut center rings and center clips from ½ in. to 5/16 in. on old presses?" Chairman Strickland suggested that it would be better to consult the press manufacturer and depend upon his judgment as to what could or could not be done.

Ralph Buvinger, Wood Newspaper Machinery Representative, discussed the subject. He stated that the problem is not as difficult as it might seem to those who had not experienced the change from wide to narrow newsprint roll widths. Many papers have made the change and have saved money. With respect to the question he stated he doesn't think anyone knows how thin the thickness of clips can be in the neck. Some papers are using clips 7/32 in. at the neck and he saw one press on which the clips had been cut down to 3/16 in. Mr. Buvinger then discussed tests made in the Wood laboratories for determining the strain expressed in pounds at various speeds up to 60,000 i.p.h. A plate turning over at 60,000 i.p.h. has a pull of about 25 lbs. for each clip. The safety factor of clips is always greatly in excess of the duty for which they are designed.

Mr. Buvinger explained that the presses fitted with 60 deg. angle clips and rings usually have a width of 3/8 in. or 5/16 in. at the neck. Presses fitted with 45 deg. clips and rings usually have ¼ in., 7/32 in. or 3/16 in. at the neck. The peculiar thing about difference of opinion in clip angles is that the men using 60 deg. clips fear that ¼ in., 7/32 in. or 3/16 in. is too weak, while the 45 deg. pressman fears that the 60 deg. angle will not hold the plates.

Color on the Upgrade

"Is the printing of color in both local and foreign advertisements as popular today as was first thought a few years ago?" was answered by Business Manager George Biggers of the Atlanta *Journal*, at the request of Chairman Strickland of the Nashville *Banner* and *Tennessean*. He showed them that the use of newspaper color is increasing and challenged the mechanical executives present to develop newspaper color printing, particularly "spot" color (black and one color). He says newspapers have made a mistake in discouraging the use of spot color advertisements.

Quoting from recently compiled *Media Records* survey, he said that there had been an 11.1% increase in spot color in 1937. In the first six months of 1938 there had been an increase in run-of-paper color in ten cities alone.

In 1937, retailers throughout the country spent $2,677,700 in magazine and advertising other than newspapers. These figures show a market for newspaper advertising. He asked the mechanical executives present (after quoting figures) that where retailers are spending so much money, whether newspaper printing has anything to do with the situation. "From the newspaper selling standpoint," said he, "we must find some means of encouraging the use of more retail color in newspapers, and good color printing might be the added stimulus we need in our search for more revenue."

The White Resolution

At this juncture, Cranston Williams presented a resolution by Frank White, Pressroom Superintendent of the Augusta (Ga.) *Chronicle*, which is as follows:

"Whereas, there has developed at both the Birmingham and Atlanta Conferences the necessity for much work to be done looking toward the elimination of offset, strike-through, show-through and the eventual standardization of paper, metal, ink, rollers and blankets for the ultimate production of a better and more readable product,

"Therefore, be it resolved that the chairman of this conference appoint five delegates whose duties it will be to study the subjects outlined above and make a report of such findings and recommendations to the 1939 conference, and

"Be it further resolved that this committee be asked to work with a similar committee of the Southern Newspaper Publishers Association to be selected from the membership of that Association."

Composing Room Section

Chairman C. B. Capps assumed charge of the meeting. In the ensuing discussion on composing room cost systems, J. Homer Livingston, St. Petersburg (Fla.) *Independent*, described the McPherson cost system. In his composing room, an ad compositor is expected to set 250 in. per 7½ hr. day average. Certain time allowances are made for various kinds of composition, plain or complicated.

Maintaining Machines

Under the topic concerning the care of linecasting machines, Claude Baker of the New Orleans *Times-Picayune* and *States* and Clyde Lancaster of the San Antonio (Tex.) *Light*, discussed the maintenance systems used by their machinists. I. J. Gardner, Production Manager of the Chattanooga (Tenn.) *Times*, remarked that in his plant, a wiper is employed to keep the machines clean. Plenty of wiping rags are furnished. The wiper uses lots of "elbow grease."

John Davis, Manager, New Orleans Agency of the Mergenthaler Linotype Company, di-

Clearance—Savings average 15% on new saw trimmers, galley banks, steel imposing tables, paper cutters and rebuilt automatic press equipment, Kluges, Kellys, Miehles and Millers.

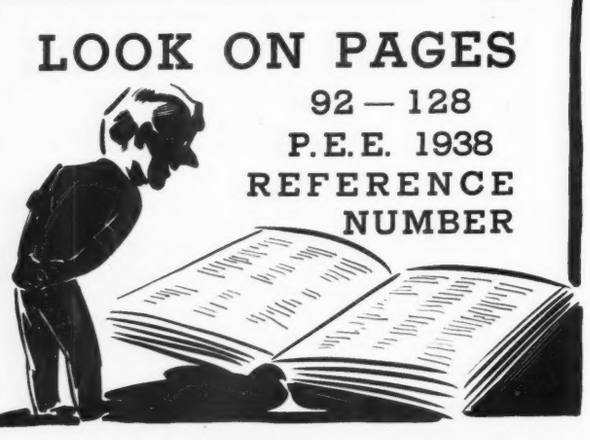
Type & Press of Illinois

A Reliable Source of Supply

512 South Canal Street Chicago

GENERAL REPAIR OF LINOTYPE AND INTERTYPE MOLDS (ANY KIND, ANY SIZE). PARTS, ETC., SINCE 1912
Makers of Reid Magazine Racks, Etc.
WILLIAM REID & CO., 2271 Clybourn Ave., Chicago, Ill.

LOOK ON PAGES
92 — 128
P.E.E. 1938
REFERENCE NUMBER



Technical Books

HANDBOOK *for* PRESSMEN
By Fred W. Hoch

New book by authority on all phases of letterpress production for the practical pressman. Contains 248 pages, 26 illustrations and 24 charts. $3.00 per copy, cash with order.

The PRACTICE *of* PRESSWORK
By Craig R. Spicher

We offer copies to our readers at the special price of $4.00 per copy, cash with order. No printer should be without a copy. (9000 copies printed.)

MANUAL *of* STEREOTYPING
By Joseph Goggin

This 256-page book conveys latest technical information and manipulating procedure. Written by a practical stereotyper. Price $5.00, cash with order.

SILK SCREEN METHODS *of* REPRODUCTION
By Bert Zahn

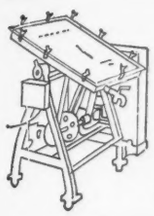
This illustrated, cloth-bound book describes in complete detail the equipment, materials and technique required. Price, $3.00 per copy, cash with order.

Send All Orders With Remittance to

Printing EQUIPMENT *Engineer*
1276 W. Third Street Cleveland, Ohio

SPRING TONGUE GAUGE PINS

Reg. U. S. Pat. Office $1.80 Doz. 50c set of 3
Made Only by Originator. All Dealers.
We Make Gauge Pins, Gauges, Gripper Fingers, Etc.
The E. L. Megill Co., 763 Atlantic Ave., Brooklyn, N. Y.



KLEAN-O-MAT PROCESS

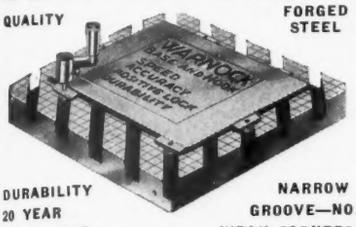
* The **only** method of cleaning magazines and mats mechanically—**without running out the mats.** Adopted by the leading printing plants and approved by Linotype Company and Intertype Corp. Improves production—Actually pays for itself.

KLEAN-O-MAT CORPORATION
30 Rockefeller Plaza New York, U. S. A.

CONSULT THE
P-Double-E Index
FOR EQUIPMENT INFORMATION

WARNOCK BASE
If you want quality, rigidity and durability investigate the Warnock Base. First and original in the industry. **Send for our 1938 Catalog.**

QUALITY FORGED STEEL



DURABILITY 20 YEAR GUARANTEE
NARROW GROOVE—NO WEAK CORNERS

W. S. WARNOCK CO.
Original Block and Hook Manufacturer
1524 Jonquil Terrace, Chicago, Ill.

If you want to know where it is made, look it up in the November REFERENCE NUMBER

SAFETY·RELIABILITY·ECONOMY
CLINE
PRESS DRIVES and CONTROL
Reels, Tensions and Pasters . . .
CLINE SYSTEM
CLINE ELEC. MFG. CO.
Chicago: 211 West Wacker Drive
New York: 220 East 42nd Street
San Francisco: 1st Nat'l Bank Bldg.

Offset Or Letter Press
GET YOUR COPY OF THIS BOOK TODAY.
NO COST—NO OBLIGATION
American Made by
WEBENDORFER-WILLS CO., INC.
Builders of Printing Machinery for over Thirty Years
MOUNT VERNON, NEW YORK, U. S. A.

PREPARE FOR THE HOLIDAY RUSH

Send for circulars on the Rouse Vertical Rotary Miterer and the Rouse Band Saw.

H. B. Rouse & Co.
2216 N. Wayne Ave., Chicago

cussed the maintenance of composing machinery. The most important thing, he said, is that the manufacturers believe cleanliness is next to Godliness. He also offered to send a suggested maintenance chart to anyone.

Releasing Pages to Stereotyper

Claude Baker, Composing Room Superintendent, New Orleans *Times-Picayune* and *States*, in speaking upon the topic related to the release of pages to the stereotype department, described the use of a large blackboard which is used in his plant to mark up pages as they are sent from the makeup to the stereotype department. His plant publishes two papers with day and night operation. Each paper has five editions. Copies of the page delivery time go to him in the form of a report.

W. B. Astor, jr., Stereotype Superintendent of the Memphis *Press-Scimitar*, discussed the subject and stated that he has handled as many as 30 forms in 30 min. in an emergency. He suggested that where possible, the want ad and editorial pages should be sent to the stereotype room early. However, the sending in of pages in a manner which will permit the stereotype department to handle pages expeditiously is a purely co-operative matter.

Clyde V. Lancaster, San Antonio (Tex.) *Light*, spoke of a schedule in use in his plant to avoid crowding the stereotype department. The schedule is followed closely. Occasionally, stories are duplicated as the result of adhering to the schedule, but in general it works out satisfactorily.

One Operator for Ludlow System

W. B. Sandlin, Miami (Fla.) *Herald*, Claude Baker and other composing room executives seemed to agree that it is best to use one operator for the Ludlow system, except during periods when an extra operator can be assigned to assist for the duration of the rush.

Repair Parts Record

It seems that several of the executives attending the conference keep records on the cost of parts, matrices, etc., for their composing machines. Composing Room Superintendent Baker stated that Machinist Downes' cost is $3.71 per month per machine for a 28 machine plant. This includes replacement matrices, wipers, etc. No parts are made in the plant. He mentioned these figures applied to machines which are used on two papers—day and night operation.

Chairman Capps said the keeping of costs of machine parts replacements shows whether a machine may be worth keeping and in addition prevents the expenditure of too much money for repair purposes in relation to the production which is being gotten.

Ralph Buvinger arose to state that the newspaper publishing business is a manufacturing business and should be considered as such. If parts for machine repairs are really needed, those parts should be purchased. You pay for replacement expense in the end either with repairs and loss of production or with a new machine.

Tuesday Afternoon Meeting

Stereotype Section

L. E. McCracken assumed the chair at the opening of the Tuesday afternoon meeting, at which time stereotype topics were continued. In discussing the topic, "Effects of separate water control on casting boxes," it seemed to be the prevalent opinion among those experienced with the subject that if the casting box is cooled from both sides porosity is thrown to the middle of the plate, if cooling is accomplished from the back, porosity is driven towards the front of the plate; likewise, if cooling is effected from the front, porosity occurs in the back of the plate.

The subject of the experimental work on stereotype plate hardness as the result of controlled water cooling accomplished by Lester Yeager, Production Manager of the Indianapolis *Star* in collaboration with Professor H. Vance White of the University of Virginia, and the results of which were reported by Mr. Yeager at the Toronto Conference, were highly commended. W. B. Astor, jr., feels the investigation is a step forward. Henry Logsdon, Stereotype Superintendent, Louisville *Courier-Journal* and *Times*, hopes Mr. Yeager will make further experiments with the vacuum casting box.

Henry Logsdon related the *Courier-Journal* and *Times'* experience with casting stereos progressively from the same design up to six generations removed from the original. He thinks the advertising salesmen can be an instrument for eliminating this evil more than anyone else in the newspaper organization.

Frank White, Augusta (Ga.) *Chronicle*, also spoke on the evils of progressive casting of stereos several generations removed from the original. Not only is depth lost in the casts but space is lost as well. These casts interfere with good printing because of the inking problem. He advocated the installation of some kind of a filing system so casts can be made from the original mat on repeat orders.

Miller Sherry, St. Petersburg (Fla.) *Times*, installed a detail desk which handles considerable routine matters. When a foreign advertisement shell cast begins to wear, the

detail desk furnishes the original mat. He feels there is no way to educate the advertising representatives.

Mold to the Bowls Only

In discussing the proper depth and pressure required for molding dry mats, W. B. Astor, jr., of the Memphis *Press-Scimitar*, says it is good practice to mold for bowl depth only, *i.e.*, to the bottom of the bowls in letters like "a," "o," "e," and so on. If the presses are properly packed, this kind of molding will give sufficient depth in the plate to print sharply.

That the stereotype process is yet regarded as an Art was evidenced when the question came up about the condition of metal in the stereotype room as to content and heat in casting. The general opinion is that since no two stereotype equipments are alike and that local conditions vary so much, each stereotype department is a problem in itself. When metal causes trouble it is best to call in a representative of the company from whom the metal supply has been purchased.

A stereotype superintendent wanted to know how many casts could be made successfully from a mat. The answer was not more than three. The remark was passed that the original mat doesn't mean anything if it hasn't been molded with proper depth of impression.

W. B. Astor, jr., and Henry Logsdon both testified that they had secured 500 molds from zinc halftones and that the last mats were practically as good as the first. The only noticeable difference, said Mr. Logsdon is that the highlight dots in a halftone were a little thicker in the last mat.

Photo-Engraving Section

Costs

Louis Hess, Photo-Engraving Superintendent, Memphis (Tenn.) *Commercial-Appeal*, took the chair and announced the question regarding method used in arriving at gross cost per square inch for engravings would be discussed. Charles J. Conrad, Photo-Engraving Superintendent of the New Orleans *Times-Picayune* and *States*, arose to state he wanted detailed information about engraving costs in the newspaper plant. Chairman Hess stated that engraving costs are kept in his plant. His costs runs approximately 4.80c per sq. in. However, after investigating methods for arriving at costs, he is convinced that the method used in some plants is not accurate. By taking total square inches of plates used, a premium is put upon efficiency. Some plants allow 10 or 11% for waste. Mr. Hess asserted no engraver exists who can confine his waste to 10 or 11%. He thinks the right way to arrive at costs is by considering the actual square inches of cuts produced and to allow credit in the money received from waste, scrap, makeovers, etc.

One photo-engraving superintendent took issue in the discussion and stated that his costs were reckoned on the total amount of plates by referring to the total amount of square inches in total metal used. He contended that waste costs as much to the publisher as the actual space used.

Mr. Conrad stated that the reason some photo-engraving costs are astonishingly low and some are very high is that some plants fail to charge in rent, chemicals, heat, power, light, etc., while others do charge in all of these things. Mr. Conrad pointed out it is fallacious to multiply the number of square inches per sheet of zinc used per month by the number of sheets used and expect the total to represent the number of square inches of cuts which have been obtained. By so doing, no account is taken of the waste metal between the cuts on flats.

Southern Paper-Making Progress

Cranston Williams reported briefly on the Southern newsprint situation. He stated that since the death of Dr. Charles Herty recently reports had been circulated that his death had been a great blow to the manufacture of newsprint from Southern pine. He said these reports are not true, inasmuch as Dr. Herty had finished all of his work and there was nothing more to be done chemically. Delay in starting operations in the proposed mill at Lufkin, Tex., is due to a number of things, none of which could have been controlled. An RFC loan has been made and it is hoped to start making paper at the Lufkin mill by January, 1940. The mill will have a capacity of 40,000 or 45,000 tons of newsprint per year. It has been demonstrated by Dr. Herty that paper can be made out of all kinds of Southern woods. The new mill can pay as good wages as anywhere else. Trees can be grown four times as fast in the South as in Canada to sell at a price as favorable as exists now. All tonnage of the first mill will be taken up by Oklahoma, Texas and Arkansas publishers. Tensile strength, porosity, etc., of paper made from Southern wood compares favorably with other newsprint. In some factors, Southern newsprint exceeds in quality.

Consult This Index

Advertisers

For October 1938

	Page
American Publishers Supply	49-54
American Type Founders Sales Corporation	30-31
Agency: G. M. Basford Co., New York, N. Y.	
Atlantic Zinc Works	47
Bijur Lubricating Corporation	29
Agency: G. E. Hatch, Advertising, New York, N. Y.	
Bingham's, Samuel, Son Manufacturing Company	35
Agency: L. W. Ramsey Co., Chicago, Ill.	
Booth, E. A., Rubber Company	45
Brandtjen & Kluge, Inc.	12
Burgess Cellulose Company	43
Agency: Fred A. Robbins, Inc., Chicago, Ill.	
Certified Dry Mat Corporation	37
Agency: The Henry P. Boynton Advertising Agency, Cleveland, O.	
Challenge Machinery Company, The	37
Agency: Simmonds & Simmonds, Inc., Chicago, Ill.	
Cline Electric Manufacturing Company	57
Agency: L. W. Ramsey Company, Chicago, Ill.	
Cottrell, C. B., & Sons Company	19
Agency: Fred Glen Small, New York, N. Y.	
Cromwell Paper Company, The	55
Agency: Roche, Williams & Cunnyngham, Inc., Chicago, Ill.	
Cushman Electric Company	49
Dayton Rubber Manufacturing Company, The	11
Agency: Geyer, Cornell & Newell, Inc., Dayton, O.	
Eastern Newspaper Supply	50
Edes Manufacturing Company, The	53
Agency: Callaway Associates, Inc., Boston, Mass.	
Goodrich, The B. F., Rubber Company—(Niles & Nelson, Inc.)	6
Agency: Griswold-Eshleman Co., Cleveland, O.	
Hammond Machinery Builders, Inc.	49
Harris-Seybold-Potter Company	8
Agency: Baker and Baker & Associates, Inc., Cleveland, O.	
Ideal Roller & Manufacturing Company	33
Agency: Arthur E. Theobald, Advertising, Chicago, Ill.	
Imperial Type Metal Company	45
International Printing Ink Corporation, The	25
Agency: T. J. Maloney, New York, N. Y.	
Intertype Corporation	Outside Back Cover
Agency: Fred Glen Small, New York, N. Y.	
Kansas City Smelting Company	54
Kemp, C. M., Manufacturing Company, The	23
Agency: Frank D. Webb Advertising Agency, Baltimore, Md.	
Kimble Electric Company	51
Agency: Kirkgasser-Drew, Inc., Chicago, Ill.	

	Page
Klean-O-Mat Corporation	57
Lake Erie Stereotype Equipment Corporation	39
Agency: Horace A. Laney, Buffalo, N. Y.	
Lanston Monotype Machine Company	26-27
Linograph Corporation	25
Agency: Fred Hinrichsen, Advertising, Davenport, Iowa	
Linotype Parts Company	41
Ludlow Typograph Company	5
Megill, The E. L., Company	57
Mergenthaler Linotype Company	Inside Front Cover
Agency: Kenyon & Eckhardt, Inc., New York, N. Y.	
Milwaukee Saw Trimmer Corporation	51
Monomelt Company, The	21
Agency: Olmsted-Hewitt, Inc., Minneapolis, Minn.	
Montgomery & Bacon	47
Niles & Nelson, Inc.—(B. F. Goodrich Rubber Co.)	6
Agency: Griswold-Eshleman Co., Cleveland, O.	
Rapid Roller Company	43
Agency: Burton G. Feldman & Assoc., Chicago, Ill.	
Reid, William, & Company	56
Riegel Paper Corporation	50
Agency: William H. Hodgins, New York, N. Y.	
Rolled Plate Metal Company	47
Rouse, H. B., & Company	57
Agency: Clifton Kirkpatrick, Chicago, Ill.	
Scott, Walter, & Company	7
Sinclair & Valentine Company	52
Sta-Hi Corporation	3
Tingue, Brown & Company	55
Agency: The Overhague Advertising Agency, New York, N. Y.	
Type & Press of Illinois	56
Vandercook & Sons	Inside Back Cover
Agency: Clifton Kirkpatrick, Chicago, Ill.	
Vulcan Proofing Company	39-47
Agency: Fred Glen Small, New York, N. Y.	
Warnock, W. S., Company	57
Webendorfer-Wills Company, Inc.	57
Winternitz, Samuel L., & Company	55
Agency: Harold I. Collen, Advertising, Chicago, Ill.	
Wood Flong Corporation	41
Agency: Metropolitan Advertising Company, New York, N. Y.	
Wood Newspaper Machinery Corporation	10
Agency: Fred Glen Small, New York, N. Y.	

Technical Information and Literature

FOR PRODUCTION AND MECHANICAL EXECUTIVES ONLY

For Your Convenience—Circle the numbers on the convenient postage-paid return card, supply your name, title and company address and mail—we do the rest. Manufacturer or supplier will send you information or literature about equipment or supplies advertised in this issue. This card saves you time and postage—Keep Informed.

PRESSROOM

1 $3,750 in cash awards for ideas on the most important features of letterpress equipment. Rules for the A.T.F. contest given on pages 30 and 31. Write today for your entry blank.

2 NEWSPAPER PRESSES—Scott Presses—"equipped with solid steel printing cylinders which run in large size tested roller bearings—large ink carrying capacity—air shock absorbers—powerful gear drive." Page 7. Write for complete data.

3 NEWSPAPER ROLLERS—See page 6 for results achieved by Goodrich Rollers: "cleaner printing, shut-downs ended, money saved." Milwaukee Journal installation featured. Write for names of newspapers near you now using them.

4 TYMPAN—Riegel's Certified Tympan . . . "a low-priced sheet with a hard, even surface and exceptional strength . . . ideal for short run job work." Free trial sheets . . . state press and size.

5 AUTOMATIC LUBRICATING SYSTEM—"With Bijur Lubrication the proper oil film is automatically metered to each bearing . . . whatever its type, location, speed, load. Longer machine life, uninterrupted production, reduced costs."—Page 29.

6 NEW ROLLER—Newest Ideal Roller "is a process base as soft as composition . . . Its ability to ink properly reflects itself in impressions that are clean, sharp and uniform." See page 33. Write today.

7 PRESS BLANKETS—Rapid Roller's Mercury Blankets have "oil resistant surfaces for longer wear; are free of blemishes and porosity; have super-smooth surface and greater tensile strength." Page 43.

8 AUTOMATIC PLATEN PRESS—"Profit with up-to-the-minute equipment . . . Kluges pay for themselves . . . will do die-cutting and embossing as well as fine halftone work." Write for further facts. See page 12.

9 ROLLER COATING MACHINE—Bingham coating machine as illustrated on page 35 "produces soft, springy rollers with perfect printing surfaces." See the illustration and description. For facts and estimates write today.

10 ROTARY PRESS—A Cottrell 2 color high speed rotary press is shown on page 19. "A press for moderate and long runs . . . the need for makeready is now practically eliminated." Descriptive literature.

11 ROLLERS—See page 11. Dayco rollers—"greater mileage and superior inking characteristics . . . the right consistency and affinity to properly distribute and deposit ink." Actual figures and case histories available.

12 "THREE MONOGRAPHS ON COLOR"—Published by I.P.I.—have been called an outstanding contribution to color knowledge. See page 25. Write today. Will let you know how to get a set.

13 NEWSPAPER PRESS BLANKETS & INKING ROLLERS—See page 39 for important features of: Vulcan Felt, Nonfelt and E.D. Blankets; Draw Sheets; Laminated and Cork Underpacking; and Vulcolastic Rollers.

14 BLACK INKS for modern high speed presses. "Champion Halftone—a non-scratch dense black, will not offset. Champion Super—fully toned, free flowing. Champion Book—high grade, good density." Page 52. Investigate further. Sinclair & Valentine.

15 OFFSET PRESSES—29 Harris color units, in the Stecher-Traung Corporation. See page 8. "Gauge plant possibilities by measuring equipment with the new line of Harris offset presses."

16 MOTORS—"Kimble specializes in motors for the printing field." Will send literature "to show where special Kimble motors can aid your mechanical production."

17 COMMERCIAL PRESS ROLLERS—Gelastic Rollers—for modern, high-speed presses—"turn out better work, with fewer costly press delays."—"Are soft and resilient—unaffected by temperature change." Page 47.

COMPOSING ROOM

18 STRIP CASTER—"Save money with an Elrod . . . simple in operation, low in first cost and maintenance . . . produces wide range of strip material." Page 5. Write for full information on this Ludlow product.

19 LINECASTING MACHINES—At the Jersey City Printing Company, 22 Linotypes, 13 of them Blue Streak Models, are in operation today. Linotypes "shine in high-speed production of finer printing"—inside front cover.

20 NEW CATALOGUE—"Shows many parts, accessories and repairs on which we can save you money"—Montgomery & Bacon. Linotype mold disks rebuilt—Magazines for linotypes. See page 47. Write for this catalogue.

21 PROOF PRESSES—"Give your advertisers all the proofs they want"—see the inside back cover. Three Vandercook presses shown and described. Information and details of performance will be sent on request.

This card must be filled out completely in order to secure the literature or information you request. Please circle only bulletins you particularly want.

PRINTING EQUIPMENT ENGINEER October

Without obligation please have the manufacturers send me literature or information circled below. (These numbers correspond to numbers on descriptive paragraphs)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
41 42 43 44

PRINT YOUR NAME AND ADDRESS

NAME.....TITLE.....DEPT.....

FIRM NAME.....

22 SAW TRIMMER—Investigate the Hammond Glider Trim-O-Saw's "revolutionary sawing features . . . its remarkable ease, speed and accuracy." page 49. Write today for users, prices and full information.

23 TYPESETTING MACHINES — 32 distinctive Monotype advantages are listed on pages 26 and 27 by the Lanston Monotype Co. See these pages. Further details will be mailed on request.

24 QUOINS—Prices reduced 22% on Challenge Hi-Speed Quoins. See page 37. These Quoins "will save you 70% to 80% on lock-up time—insure accurate register." Complete list of reduced prices available on request.

25 SAW TRIMMER—Milwaukee's C. & G. Saw Trimmers have these features: "Easy movement of work through saw; C. & G. Universal saw blades; positive safe locking of work; new angle gauge. Page 51. Complete descriptive literature on request.

26 TYPESETTING MACHINES—"Savings can be effected" with the modern streamlined Intertype and its latest auxiliary features. Intertype advertisement on back cover. Investigate now.

27 SECOND ELEVATOR and DISTRIBUTOR BOX BARS—"Breakage is discouraged when installation is made of our improved second elevator and distributor box bars." Linotype Parts Co. Page 41. Descriptive circular available.

28 TYPESETTING MACHINE—The Linograph "50" is featured as being "fast, smooth, easy to operate." "Has main cams of chrome-nickel alloy; elevator jaws of oil-hardened tool steel." Other features on page 25. Descriptive book on request.

29 TYPESETTING MACHINE MOTORS —"Use Cushman offset motors for maximum capacity and low operating cost." Two types. Ball Bearing and Standard "self-oiling" models. "12,000 Standard models, alone, in use today." Write for information.

STEREOTYPE DEPARTMENT

30 DRY MATS—Certified Dry Mats "promote better legibility and thus reflect increased advertising income."—Page 37. Write for samples. Specify gauge, shrinkage desired, type of equipment used.

31 SCORCHER—PACKING FELT—MOLDING BLANKETS—Form-O-Scorch, shown on page 54, "has direct heat—thermostat—temperature control—adjustable cover tension," and other features. On page 49 featured American Publishers Supply gummed packing felt and cork molding blankets. Write for samples.

32 DRY MATS—"For more contrast and detail use Wood Mats. They hold those slippery, easy-to-lose middletones. Try them out." Page 41. Sample lots available. Specify thickness, shrinkage and type of equipment used.

33 WOOD CASTING EQUIPMENT—User reports "has considerably improved the printing of solids and halftones . . . eliminates creeping of the mat. Many newspapers are installing this equipment on all types of autoplate machines."—Page 10. Will send complete information.

34 FORMER—"In maximum shrinkage the Junior Former will always effect uniform casting and printing levels"—Sta-Hi Corp. Page 3. "Irregular casting levels cause expensive production costs." Write today for further particulars.

35 DRY MATS—On page 43. "Those who care secure their results with Burgess Chrome Mats." In asking for samples please specify thickness required and type of equipment. Write today.

36 MATRIX PRESS—Lake Erie Directomat—"twice as fast; saves space; eliminates stretch and distortion; instant and positive adjustment." Other features on page 39. Performance and economy information on request.

MISCELLANEOUS

37 METAL MELTING FURNACES—The Monomelt system of direct melting and feeding "provides automatic control of temperature, metal flow and level under any typecasting capacity . . . Metal fed in molten state offers advantages." Page 21. Write.

38 CUT CEMENT & KEYBOARD ROLLS —Booth's Zink Cut Cement featured on page 45. Descriptive literature on request. Booth's Green Rubber Keyboard Rolls "are resilient—and dependable for day-in and day-out service."

39 ZINC—"Edes' strategically located warehouses, with adequate stocks on hand at all times, are prepared to take care of abnormal demands. Processing and finishing are never hurried — can be depended on." Write.

40 TYPE METAL CONTROL—Refis-alloy—"easy, certain method for keeping type metal in working condition." "Scientifically correct—sharper type faces, better slugs, cleaner pot throats, greater production." Page 54. Write for literature and trial package.

41 CUT MOUNTING TAPE and BACKING FELT—"Plate-Tak" . . . a cut mounting tape . . . samples on request. "Flecto" . . . a backing felt . . . "successfully used on all dry mats" . . . free samples. —Eastern Newspaper Supply.

42 METAL MELTING EQUIPMENT—Kemp equipment "guaranteed to save 40% in fuel . . . will pay for itself in lower fuel bills irrespective of faster melting, closer temperature control, or dross reduction." Page 23. Investigate.

43 METAL CONTROL—"Your metal may look good, but why not be sure? Imperial's Plus Plan keeps your metal balanced by adding exact amounts of tin and antimony for dross." Page 45. Investigate further.

44 ZINC—"To maintain high quality and to meet new demands, men are constantly at work in the laboratory of the Atlantic Zinc Works." Page 47. Have you any engraving metal problems? Write today.

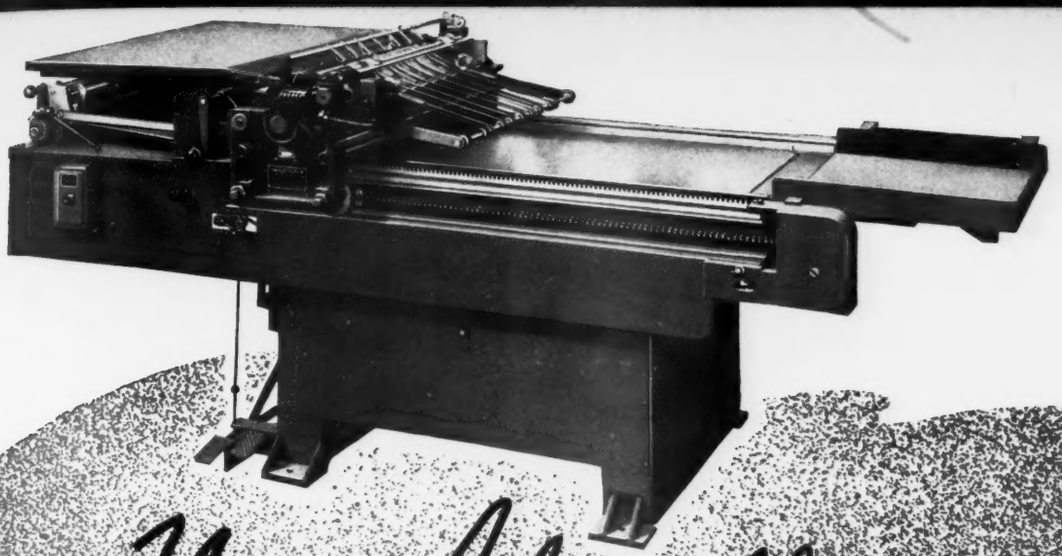
Check off the literature or information you want on reverse side. Postpaid. No obligation.

Postage Will Be Paid by Addressee

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD
First Class Permit No. 2285, Sec. 510 P. L. & R. Cleveland, Ohio

Printing EQUIPMENT Engineer
1276 W. 3rd Street
Cleveland, Ohio



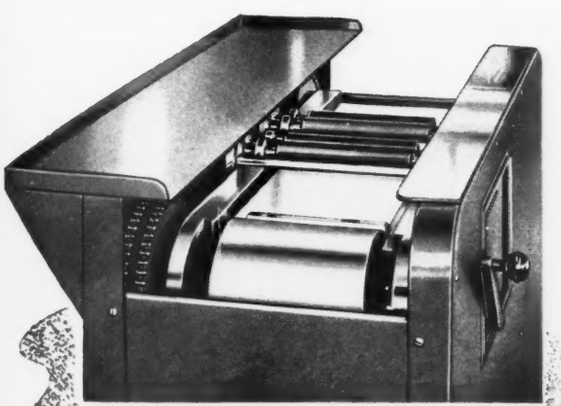
Give Your Advertisers ALL THE PROOFS THEY WANT

Many newspapers have found that a free policy of supplying proofs for posting and display has increased the effectiveness of advertisements to a point where more lineage could be sold.

Vandercook Proof Presses, selected to meet your requirements, reduce costs to a minimum — whether proving full page displays or galleys.

NO. 325A VANDERCOOK POWER PROOF PRESS

prints sheets 24¾" x 27" at the rate of 1000 an hour. It will print a full size newspaper page advertisement in a stereotype chase without printing the chase. Proofs equal production press quality making the No. 325A especially valuable for commercial printers.



NO. 22 VANDERCOOK ELECTRIC PROOF PRESS

will print 40 proofs a minute. It is used extensively for proving type in galleys as it comes from the machines and the smaller advertisements. No. 22 Vandercook will produce proofs of excellent quality.

NO. 23 VANDERCOOK ELECTRIC PROOF PRESS

is similar in construction and operation to the No. 22 Vandercook. It will print 40 proofs a minute. It proves full tabloid size pages or five column newspaper advertisements in galleys.

No. 325A, No. 22, and No. 23 Vandercook Proof Presses are essential equipment in the high speed economical production of *good* proofs. They are equally valuable to newspaper publisher or printer. *Information, and details of performance will be sent upon request. Write now.*

VANDERCOOK & SONS

MAIN OFFICE AND FACTORY — EASTERN BRANCH

You are paying for Intertype Slug whether you use them or not

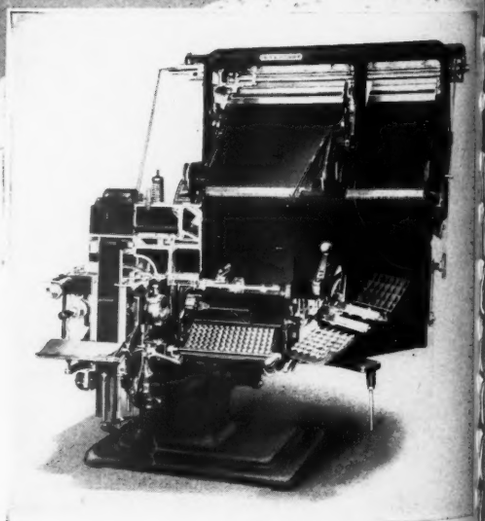
Automatic quadding and centering

Six-mold disk... six slug size... instantly availab... up to 30 em...

Two-letter display matrices

New facilities for setting mixed composition

Text or display type at a mere touch of the operator's finger



HIGH COSTS resulting from the use of obsolete equipment can't be evaded. There is much truth, therefore, in the trite saying that you pay for modern equipment whether you buy it or not. It is better to *spend* money for new equipment than to *waste* it on old equipment; for the former becomes a dividend-earning asset, while obsolescence is an ever-increasing liability. Think of the savings that *you* could effect with modern Streamlined Intertypes and their latest auxiliary features. *Don't hesitate* ... Investigate ... NOW!

Intertype

BROOKLYN, NEW YORK

BETON EXTRA BOLD AND CAIRO